NIGERIA'S TRANSPORT PROBLEMS AND THE THIRD NATIONAL DEVELOPMENT PLAN 1975-80

A THESIS

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PREFACE

Africa is, generally, noted for its scanty population, but to any visitor in Nigeria, the reverse impression is the case. The cities are seen teaming with people, the roads congested with cars, bicycles, motorcycles, and pedestrians forging ahead to make their ways through the crowds. For precaution to other road users, vehicle drivers blare their horns persistently as they very slowly penetrate the crowds into their lanes where the speed is slower, almost to a standstill. Such is the case in cities--especially Lagos. Nigeria has numerous transport problems which tend to hinder her economic development.

In this study, effort has been made to bring in all the major transport problems reaching far into the rural areas. Hence, much emphasis is given to road problems which is general to all communities in Nigeria. The railways, seaports, inland waterways, and airways problems have also been spotted out, and suggestions made for ultimate solution to the problems in future.

My chief debt in producing this work is to my professor and adviser--Dr. Thomas D. Boston. I also owe a great deal to Professor Allen, Messrs. Enekan T. Akpan and Ebong Ikoiwak, for their encouragement and help.

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Introduction

Geographical Features and General Characteristics--The Federal Republic of Nigeria has an area of 913,072 sq. km. Its widest part from East to West is over 1,120 km and from North to South 1,040 km.

Nigeria is bounded on the west by the Republic of Benin, on the north by the Republic of Niger, on the east by the Republic of Cameroon, and on the south by the Gulf of Guinea. The most southerly and northern extent of the country is between latitudes 4^{o} and 14^{o} north of the Equator, and therefore wholly within the tropics. The western frontier runs nearly along 3^{o} east meridian, while the eastern frontier almost touches 15^{o} east meridian.

The coastline is short and highly intersected by a network of creeks, lagoons, and rivers, chief among which is the Niger and its intricate delta. Like every other west African coast, Nigeria's coast is filled with sand-bars, dunes, and silts which favor the growth of Mangrove forest. Beyond this, the low lying coast gives place to undulating land with tropical forests which at present have been cut mostly for farming purposes. Behind this, the land rises to meet the ancient dissected plateaux of Udi, western states, oban hills, and Mandara at the border of Cameroon. In this area, only grass and stunted baobab trees predominate. But along the Niger and Benue basins, tall trees grow.

Finally, the plateaux descend into the northern plains where cotton, groundnut, and pastoral farming dominate other activities in the north. At the extreme north, desert conditions of sweltering heat and no trees are experienced, but very small amounts of summer rains occasionally fall.

Nigeria is populous. With a population of over 80 million in 1973, she has the densest population in Africa, containing about 16 percent of Africa's and 22 percent of tropical[1] Africa's population.[2]

History

Nigeria, as a political entity, came into being when the northern and southern Protectorates were amalgamated by Lord Lugard in 1914. The actual making of the country through waves of wars and series of conquests took hundreds of years of which there are no time records. But through multi-linguistic groupings, it is known that the Hausas came from Arabia, the Yorubas from the crumbles of various West Africa Empires--Ghana, Songhai, Mali, etc. The Yorubas are said to have had an ancient Empire which extended almost to Accra.[3]

But there is no actual indication to show where the Ibos, Ibibios, and Ijaws came from to settle in Nigeria. A research study is currently being conducted by Nigerians to find out those origins.

The Early European contact brought the various ethnic groups together

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[1]Excluding countries around the Mediterranean Sea.

[2]A. Sokolski, The Establishment of Manufacturing in Nigeria (New York: Frederick A. Praeger, 1965), p. 7.

[3]Federal Ministry of Information, Nigeria Handbook (Lagos: Modern Publications, Nigeria, Nigeria Ltd., 1975), p. 20.

until the country emerged into one Nigeria, deriving its name from the River Niger, which runs through the country.

Though unified, an average Nigerian still thinks in terms of ethnic groups. This tribal feeling so permeated the political, economic and social life of the people that the first Republic ended in a civil war. But since the civil war, tribal sentiments have subsided through the efforts of the Federal Military government. This government has not only refused to use the tribally inflated census figures of 1973 for revenue allocation into the states, but has also demonstrated fairness in the distribution of other amenities. For example, road rehabilitation has received fairly adequate attention in all states irrespective of whether the inhabitants are the Fulanis, Ibos, Efiks, Ibibios, etc. Furthermore, the result of the 1977/78 Federal Scholarship was delayed because it was found that injustice resulting from sectional feelings dominated the result. That is, some particular areas were awarded in large numbers, while others were discriminated against.

Statement of the Problems

Despite the efforts made by the federal and state governments to execute economic development plans, most of Nigeria's transport problems remain untouched. Roads, especially in the rural areas, are not only bad but few; likewise railways--narrows gauge of 3'6". Seaports are predominantly undredged, excepting Lagos. Airports are few and lack modern facilities.

Other rapid developing problems are the "bottle-neck" and "go-slow" on the Nigerian city roads. For instance in Lagos, it takes more than one

hour to travel one mile during the busy periods (8 to 11 a.m. and 3 to 6 p.m.) due to traffic congestions. Consequently, workers unavoidably arrive late at their places of work and return late to their homes. Irrespective of building of overhead bridges and people made to drive in turns, these problems are still insurmountable. Likewise in cities like Ibadan, Kaduna, Kano, Enugu, Port-Harcourt, Onitsha, and Calabar.

In this study, priority will be given to road transport problems which are common to all the states in the country. Then the railways, seaports, and finally, airports. This priority arrangement follows the approximate estimated percentage usage of the above mentioned facilities in the country. Thus, roads cover a wider area of the country than other transport systems, and therefore is used by so many people. The railways follow next, then the seaports and airports.

A Brief Overview of the Chapters

It is not within the scope of this study to unveil the microscopic transport difficulties of Nigeria, but rather to spot out the main ones that tend to thwart economic development.

Chapter one will feature a general review of Nigeria's transport system from the ancient to the modern times. Discussions on the origin and development of various transport modes of the country will cover the whole chapter. The second chapter will deal with the major transport problems in the country with more emphasis on roads. Such points as soil erosion, flood, the civil war, shallow ports and other setbacks on the country's transport system will be discussed.

Chapter three will contain administrative and other problems featuring the role of transport planners, the general decline of the railway, ineffi-

cient ports operation by the Nigerian Ports Authority, etc. Chapter four gives the Third National Development Plan and some transport solutions. In this chapter, areas of the problems that have been convered by the current plan period will be discussed. Recommendations concerning ways of improving the transport system will be a final part of this paper.

CHAPTER I

A Review of Nigeria's Transport System: Pre-colonial Days

Africa was called "The Dark Continent" by an unknown traveller.[4] One of these attributes for the darkness in the early days was transport problems. These were no roads, forests were virgin and impenetrable, the coasts were short and highly silted. People merely walked or ran if they were in a hurry.

Nigeria, as a prominent member of this continent, was no exception. She had no real roads, but bush paths which were in most cases dug deep through constant usage and gully erosion. The only road maintenance then was done with the hoes and matchet. Goods were carried on horses or camels in the north while the southerners carried their loads on their heads.

In the whole country, up to 1895, the only means of conveying goods beyond human porterage and horses' backs was water transport[5] in the riverine areas of Calabar, Itu, Degema, Brass, Akassa, Forcados, Abonema, Lagos, Warri, Onitsha and the rest.

This suited the barter system which existed at those times, since goods were not produced in great quantity. The trade in palm oil of the south in exchange for northern "lama" cows or beads was centered in Niger Delta. This was highly restricted because of poor road or path links. Again tsetse flies, which abounded the southern forests, caused a deadly disease--triopanosomiasis--on both the animals and their owners. Therefore, it was highly risky for those who used the forest paths to undertake the long hazardous journey to the south.

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[4] J. Noah, Story of the Ages (Oxford University Press, 1965), p. 256.

[5] P. Kilby, Industrialization in an Open Economy (Cambridge: University Press, 1969), p. 4.

Modern Period

A. Railways

But by 1898, the need for administrative cohesion coupled with the assessment of economic potentials of the country motivated the British government to establish a railway into the interior.[6] Beginning in Lagos that same year, the railway reached Ibadan by 1901, Ogbomosho in 1907, and Jebba in 1909.[7] Two years after (1911), the Baro-Kano line, serving the Niger by river from Burutu in the delta, was completed and in 1912 joined the Lagos railway line at Minna. At the completion of Jebba Bridge across the Niger in 1915, the railway line crossed over to Kaduna and from there to Kano and Nguru. The tin mines at Jos were also connected to the railway at Zaria.

Between 1913 and 1916, railway track was laid from Port-Harcourt to Enugu mainly for transportation of coal from Udi to Port-Harcourt. From there, much of the coal was shipped to replenish the British local supply.[8] After the completion of the Makurdi Bridge across the River Benue, the railway, much like the western line, crossed over to the north and joined the Lagos - Kano line at Kaduna. This gave the country two main lines running from south to north. This also made it easy for the northern products (groundnut, hides and skin, cotton, etc.) to be transported to Lagos and Port-Harcourt for shipment overseas.

At the end of 1959, the railway system in Nigeria comprised 2,832

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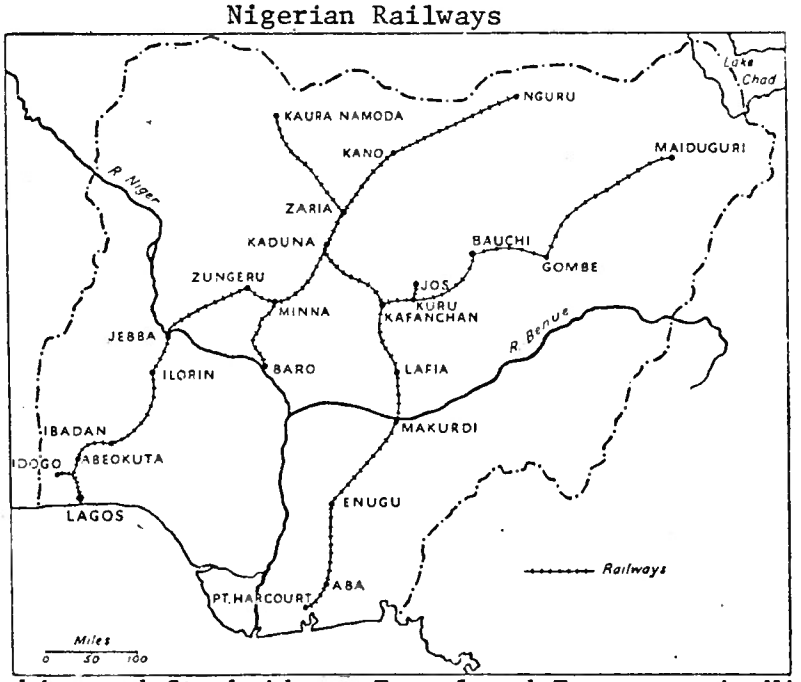
[6] Walker Guilbert, Traffic and Transport in Nigeria, Colonial Research Studies, No. 27, H.M.S.O. (London, 1959).

[7] Peter Kilby, Industrialization in an Open Economy (Cambridge: University Press, 1969), p. 36.

[8] Alan Sokolski, The Establishment of Manufacturing in Nigeria (New York: Frederick A. Praeger, 1965), p. 97.

kilometers of single, 3'6"--gauge track reaching as far as Kaura Namoda in Sokoto Province, and to Nguru in Bornu. With the cutting of the old branch line on August 27, 1958, the Bornu Extension, the first major addition since the pre-world war period was begun. The 643.74 km (402.3 miles) from Kuru, on the Kafanchang - Jos branch of the Eastern line, via Gombe to Maiduguri was completed in sections, at a cost more than double the initial loan of £10 million from the World Bank.[9] On August 14, 1961, the first 171.2 kilometers to Bauchi was opened for goods traffic; Gombe, which is further on, was served with freight traffic on December 27, 1962, and with passenger traffic on April 11, 1963.[10] Maiduguri was opened to traffic in 1965. Map 1 below shows the Nigerian Railways.

Map 1
Nigerian Railways



Source: Parkins and Stembridge - Travel and Transport in Nigeria.

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[9] K. L. Crawford, Nigerian Railway Extension Corporation, Bauchi - Bornu Railway Extension: Review of Revenue Potential (Railway printer, 1960), p. 148.

[10] Alan Sokolski, The Establishment of Manufacturing in Nigeria (New York: Frederick A. Praeger, 1965), p. 99.

Ever since the opening of the railways, goods and passenger traffic have been enormous. The primary product of the north--groundnuts (peanuts), cotton, including hides and skin--found access to the southern seaports of Lagos and Port-Harcourt. The Fulanis[11] found it difficult to trek from the north to south with a handful of cows and found an avenue to transport hundreds of them through the trains. Traders from the south, especially the Ibos and the Yorubas, traveled to and from the north selling clothes and other articles of trade.

TABLE I
RAILWAY TRAFFIC IN NIGERIA 1946-63

Year	Tons (000)	Net Tons (km)*	No. (000)	Passenger KM (mn)**
1962-63	1,394	473	6,256	297
1948-49	1,385	534	6,197	326
1950-51	1,225	536	5,585	357
1952-53	1,543	687	5,516	351
1954-55	1,983	937	5,451	349
1956-57	2,052	1,099	7,271	445
1958-59	2,353	1,214	7,015	372
1960-61	2,054	1,040	9,822	434
1961-62	2,381	1,280	11,061	482
1962-63	2,209	1,298	12,006	516

*Km - Kilometers
**Mn - Minutes

Source: Stanford Research Institute, The Economic Coordination of Transport in Nigeria (Menlo Park: S.R.1, 1961), p. 77.

From the above, it is easily seen that Nigeria's railways, even declining now, carried so many thousands of both goods and passengers before roads were opened for more traffic. But since the opening of the Bornu Railway Extension, there are no more new lines, nor other extensions. Many states, Cross River, Anambra and others, are not served by the railway.

[11] An ethnic group in northern Nigeria.

B. Roads

The development of motorable roads followed that of the railways, constituting a feeder system to the latter. From 1908, when two motor vehicles were imported for the first time to 1940, road construction in Nigeria proceeded by fits and starts. The traditional barriers--Benue and Niger rivers, the middle belt tse tse flies which menaced road users, the fear of road competition with railways--all contributed to the state of affairs.

By 1914, nearly all roads in Nigeria were unpaved. There were 3,200 kilometers (2,000 mls.) of unpaved roads throughout the Federation, mostly in the West.[12] Railway construction in Nigeria was interrupted by the First World War, and after 1918 when the war ended, the construction of the Eastern Railway line was completed. Road building started in full swing in 1923. It was during this time that the "Trunk road"[13] system was laid down by the "road board" which was responsible for skeleton road plans. In 1926, there were so many unpaved roads that the railway was asking for the haulting of competition, especially in the west where the expanding cocoa farming gave rise to a small but vigorous road transport industry. By 1933, about 218 motor vehicles were in use in western Nigeria.[14] In 1937, Nigeria had about 31,120 kilometers of roads, a third of which were merely dry season tracks, impassable during the rainy seasons. The tarred roads outside the towns were very few and of short distances. For instance,

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[12] P. Kilby, Industrialization in an Open Economy (Cambridge: University Press, 1969), p. 36.

[13] Road Classes - Trunk A, B, etc., according to width. Now, Trunk A roads are federal roads, while B belongs to the state government.

[14] P. Kilby, Industrialization in an Open Economy (Cambridge: University Press, 1969), p. 36.

Lagos to Abeokuta road (104 kilometers) was completed by that period.[15] In 1940, with the fall of France, Britain was threatened and this brought military consideration to the forefront in all the British colonies, including Nigeria. All season roads were constructed in preparation for any invasion. Lagos was connected to Kano by tarred road. In the east, tarred and paved road from Port-Harcourt joined Fort Lamy (capital of Tchad Republic) via Jos and Maiduguri.[16]

As seen above, there was no real plan to construct the roads or repair the dilapidated tracks for the interest or welfare of the Nigerians. It was not until 1946, that the first systematic economic plan was drawn up by Governor Arthur Richard (later Lord Milverton) and accepted by the country.[17] The implementation of this colonial plan gave Nigeria a little more one-lane roads and real awakening in the purchase of motorcycles, commercial and private cars, as shown by the table below:

TABLE 2
ROAD VEHICLES IN NIGERIA 1953-63

Month	Year	Commercial Cars	Private Cars	Motor-cycles	Total *
January	1953	11,014	9,511	1,216	21,741
"	1955	12,642	13,973	1,810	28,425
"	1957	16,367	19,823	3,395	39,585
"	1959	17,430	23,451	4,935	45,816
"	1961	23,908	36,761	11,151	71,820
"	1962	24,036	36,852	12,242	75,130

Source: Stanford Research Institute, The Economic Coordination of Transport Development in Nigeria (Menlo Park: S.R.I, 1960), p. 145.

Digest of Statistics, Vol. 12, No. 4, (1963), p. 65.

[15]Federal Ministry of Information, Our Communications: Highways and Bridges (Lagos: Ministry of Information, 1958), p. 11.

[16]Alan Sokolski, The Establishment of Manufacturing in Nigeria (New York: Frederick A. Praeger, 1965), p. 94.

[17]Federal Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1975), p. 9.

*Including Southern Cameroon

The actual development plans in Nigeria were drawn by Nigerians with the assistance of foreign experts. In 1962, a six-year development plan (1962-68) was launched. A total of ₦150.6 million was allocated to roads by both Federal and Regional governments (Federal, Northern, Eastern, and Western governments of that time). The execution or implementation of the plan was interrupted by the Nigerian crisis which ended in a civil war. As a result, the Eastern and mid-western states suffered a serious setback in transport systems, especially on roads and bridges. The important Niger Bridge connecting East and West at Onitsha was cut off. Roads linking Onitsha to Enugu, Enugu to Port-Harcourt via Aba, Onitsha - Oron road, etc., were heavily bombarded and rendered useless for traffic during the war.

But just after the civil war, a second development plan (1970-74) was embarked upon by both federal and state governments. The creation of 12 states in 1967 had awakened healthy competition among the states and road construction again was given a total of ₦332.6 million. As a result of inflation, change of project scope and midstream addition of new projects, the figure rose to ₦883.7 million in 1973,[18] and the 12 states allocated ₦240 million for their respective road works.

Irrespective of the above, implementation of these plans were inadequate; funds meant for the first plan were diverted to the civil war while that of the second was mainly for post-war reconstruction.[19] New projects started were handed over to the Third National Development Plan period, e.g., Calabar - Ikom road, Onitsha Bridge reconstruction, etc.

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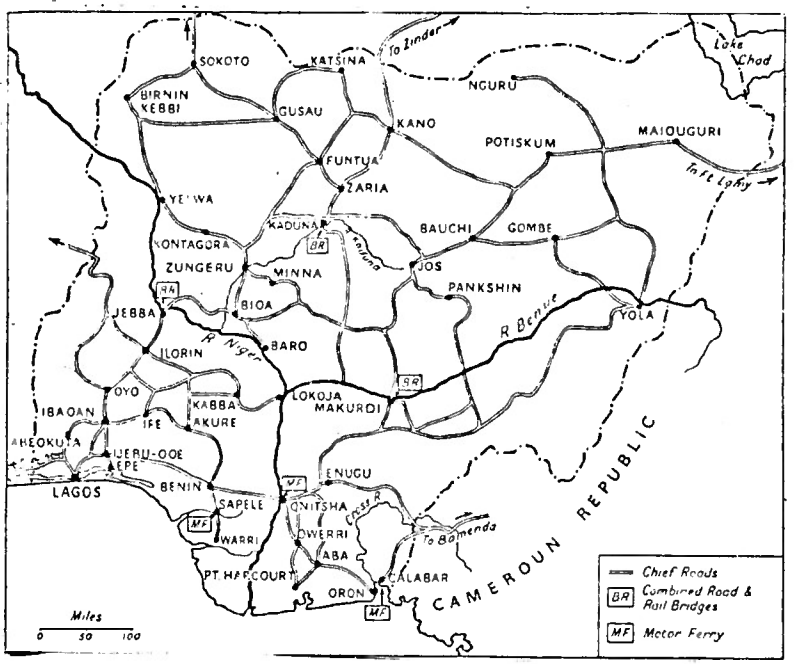
[18] Ibid., p. 203.

[19] Nigeria Trade Journal, Vol. 22, No. 3, (1976), p. 8.

Though there were still acute transport problems in Nigeria, the number of automobiles purchased in the country continued to grow very rapidly. In 1969, for example, World Bank estimate placed the number of cars in Nigeria between 67,000 and 79,000 (including taxis), and trucks and buses between 31,000 and 38,000. The effect of this on city traffic and road-bottle-neck will be discussed in the next chapter.

Map 2
Nigeria: Trunk Roads



Source: Parkins and Stembridge - Travel and Transport in Nigeria.

C. Waterways

1. Rivers

Rivers and inland waterways have shown little improvement from their early stages. Predominantly, wooden boats with sails still dot the major rivers and lagoons--even in Lagos. Oron to Calabar, Niger and Benue basins,

Buguma, Abonema, Bonny, Onitsha, and all other rivers feature more local boats than modern ones. But efforts are made by the federal and state governments to improve the system. The Elderdempster Agency, which operated Ferry System with two lunches (MV Eket & MV Oron) at Calabar River has been replaced by a Nigerian Company, "SESCOT", working closely with the Nigerian Ports Authority and Modal Agency. Other riverine transport systems are now managed by indigenous companies throughout the Federation. Yet, inefficiency in management, seasonal navigation of many rivers--Niger and Benue in the north--and many other problems still exist.

2. Ocean Ports

More important to Nigerian economy than the rivers and inland waterways are the ocean ports. The largest and most important in the country is the port of Lagos. Originally, it was silted by 11 foot-bars which blocked the harbour. The first dredging by the British administrators started in 1899[20] and ended in 1913. By 1917, the entrance of the port was dredged to 20 feet deep and ocean vessels first visited Lagos. To keep the silt at a distance from the entrance, two moles (breakwater) and a training bank was built. In 1964, the depth of the bar was maintained at 30 feet, with Apapa channel at 27 feet.

Today, irrespective of improvements made in constructing 18 deep water berths, 17 transit sheds, and 25 portal cranes, Lagos harbor is always congested. This created an almost insurmountable problem in 1976 when ships anchored for more than three months at the harbor without having chances to berth.

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[20] A. Sokolski, The Establishment of Manufacturing in Nigeria (New York: Frederick A. Praeger, 1965), p. 101.

Port-Harcourt is the second largest port with seven deep water berths and transit sheds. The initial dredging of the Port was done in 1928, but later work was carried out by Shell-BP under a long term agreement with Nigerian Ports Authority (NPA). This port was seriously damaged during the civil war and up till today has not regained its pre-war standard. But it still handles imports from overseas and exports from the hinter-land.

Other ports are: Koko, Bonny, Sapele, Burutu, Warri and Calabar. All these small ports handle some bulk of goods, e.g. crude and refined petroleum, agricultural products and so on.

D. Air Transport

Though Nigeria had small airports in Lagos, Kano, Port-Harcourt, and Calabar in the 1920's, commercial aviation did not start until 1936 when mail flight from Khartoum to Kano and Lagos was begun.[21]

This commercial flight remained insignificant until the second World War provided an impetus for greater activities. There was the need to establish an air link between the British colonies for the sake of quick communication and trade between these countries. Between 1940-41, twenty-four airports and several landing strips were constructed. In 1946, the West African Airways Corporation (WAAC) was formed to serve the four British West African colonies--Gambia, Sierra-Leone, Gold Coast (Ghana) and Nigeria. The system continued until Ghana, after independence, opted out and the organization (WAAC) was disbanded.

To substitute the defunct West African Airways Corporation, the Nigeria

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[21] Ibid.

Airways Limited, a private limited liability company, was formed.[22] Today, the Nigerian Airways schedule internal and international flights through its two international and ten national airports. Lagos and Kano connect outside world, while Ibadan, Benin City, Port-Harcourt, Enugu, Calabar, Kaduna, Jos, Sokoto, Maiduguri, and Yola are for internal in-flights. There are also 78 government and privately owned landing strips,[23] e.g. Eket and other oil fields.

It is the responsibility of the Aviation Department of the Federal Ministry of Transport to provide safe and adequate facilities, including ground services, air traffic control, aeronautical communications and meteorological services. In addition, the general administration and regulation of the air transport belongs to the same department.

But the Nigeria Airways, which is now a government corporation, provides the following fleet for its national and international flights: S F-27 Friendship, one F-28 leased from Fokker, one Boeing 707 leased from Ethiopian Airlines, and one Piper Aztec, used for air taxi. There are other joint operations with Pan American Airways, and European Airlines.

Yet this is highly inadequate for a populous country as Nigeria. At present, the demand for air transport exceeds the supply, hence the Nigeria Airways finds it highly difficult, if not impossible, to accommodate a vast number of people who want to book flights. To be successful, one has to book at least a week in advance. This is highly disappointing, especially in cases of emergency.

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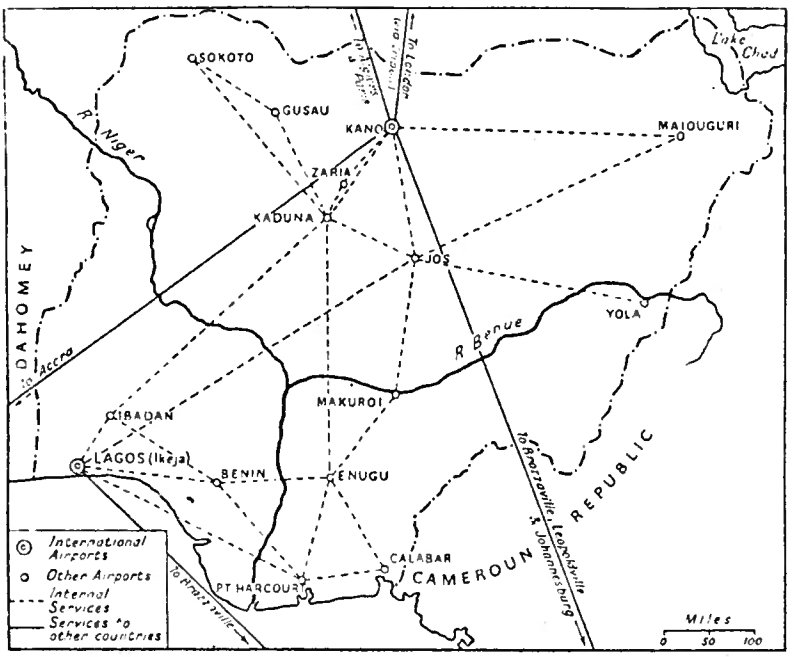
[22] E. H. Coleman, How Aviation Came to Nigeria (Lagos: Federal Ministry of Information, 1960), 0. 16.

[23] Nigeria: Option for Long-term Development (World Bank Report) 1974, p. 89.

Map 3
Nigeria Airways



Source: Federal Ministry of Information - Lagos.

CHAPTER 2

MAJOR TRANSPORT PROBLEMS

A. NATURAL

(1) Laterite and Soil Erosion: The greater part of soil in Nigeria is laterite, belonging to the ancient block plateau of Africa formed during the Caledonian age. Other crystalline rocks outcrop in three large areas - the north, west, and eastern parts. The roads in these high plateau areas are not only difficult to build and maintain, but are also subject to deep gully erosion. Since no bituminous or tarred roads are yet built in many areas, this presents transport problems to road users in those areas, and evacuation of their produce--e.g. groundnut (peanut), cotton, etc.--is much affected. This happens in plateau, Bauchi, and Anambra states. The road from Enugu via Udi Hill to Nsukka junction is difficult to maintain because of gully erosion which has resulted to heavy land slide. Though an embankment is attempted at the steep valley, land slides continue to threaten the narrow winding road.

Soil erosion (sheet) also takes place in sandy and windy areas. The effect of the wind in sweeping the ground and damaging roads is not strongly felt in Nigeria, except in the northern fringe with Niger and Tchad Republic where the effect of the Sahara Desert is strongly felt. Comparatively, it is the water-erosion which spoils the trunk "A" (Federal roads) and "B" (state roads) because there is no deep foundation. The open gutter systems on both sides of the roads also makes their edges easily

washed out and even up to the middle of the roads in most places. Pot holes are common in such areas.

Roads damaged by sheet-erosion are commonly found in Southern Nigeria where the land is generally plain. Cross River, Imo, Rivers, and other southern states have all experienced such erosion. Oron-Ikot Ekpene Road, Owerri - Aba Road and the rest have suffered this natural menace.

(2) Tropical Forests of the South Hinder Road Construction: Southern Nigeria is predominantly covered by tropical forests and dedicuous trees. Since most of the tools used for road construction are temperate designed, they easily spoil when used in Nigeria. This does not only increase the construction cost, but also delays road construction and maintenance since the machine parts are mostly ordered overseas.

This was the case when building Benin-Asaba Road, and Ondo-Ife Road. Work was delayed more than normal. In many areas where road specification needs avoidance of the old roads to thick forests, the expatriate contractors are even scared to use their delicate machines and therefore build narrow one lane roads. That was the case with Reynold Construction Company (R.C.C.) and the building of Calabar-Ikom Road.

(3) The presence of Sandbars and Dunes: The Atlantic Coasts in Nigeria being an "emergent coast" suffers from the continual scooping or scouring of the ocean floor by tides and pouring along the coastlines. This forms the sandbars and dunes which make it impossible for ocean liners to berth alongside the quays. Instead, ships anchor in mid ocean and surf boats are used to off-load the cargoes. Except in Lagos, where a strong barrier

against sandbars was built, other ports like Port-Harcourt, Warri, Sapele, and Calabar are still victims to this natural problem.

As Parkins and Stembridge commented, if Nigeria is to make full usage of the Ports, then it has to keep their entrances free from sandbars through dredging.[24] Though this is the responsibility of the Nigerian Ports Authority, the government owned corporation, the work involves a huge expenditure that the corporation cannot afford. Hence it is left for the development plans to take care of. As of now, not much has been done in this direction.

(4) Rain and Flood: As mentioned above, Nigeria is only 4 degrees north of the Equator, and therefore is entirely within the tropical down-pour of rain during the summer. Rainfall is heavy in the South, averaging about 177.8 centimeters (cm) a year at the west end of the coast and increasing to about 431.8 centimeters along the Eastern Section of the coast. This decreases inland as one moves away from the coast, until it falls to 50.8 cm in the extreme north.[25]

During the summer months, torrential rainfalls flood most roads and render them impassable. In most cases, roads with earth surface become marshy even after the flood has subsided. This happens yearly in untarred roads in Rivers, Cross River, and Ogun States. Itu to Arochuku Road of Cross River and Imo States is a typical example.

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[24]W. A. Parkins and J. H. Stembridge, Travel and Transport in Nigeria, (Oxford University Press, 1971), p. 134.

[25]Federal Ministry of Information, Nigeria Handbook (Lagos: Modern Publications, Nigeria, Nigeria Ltd., 1975), p. 9.

A. ARTIFICIAL AND ECONOMIC PROBLEMS

(1) Lack of Executive Capacity in 1970-74 Development Plan: The implementation of the above mentioned plan was solely aimed at coordination of all Federal, state and private development in the transport sector. In addition, the government policy objective was to rehabilitate all roads and bridges damaged during the Civil War. Out of a total of 485.2 million allocated for transport, a total of 187.716 was made available for roads.[26]

This was excellent, but there was no adequate Executive Capacity to make full utilization of the money budgeted for the various projects. The Federal and State Ministries (Depts.) of Transport lacked well-trained executive staff so much that most projects were not executed.

(2) Setback Caused by the Nigerian Civil War: During the Nigerian Civil War, roads and bridges were badly damaged by severe bombing and digging of trenches for the fighting soldiers. Ports were blocked by dumping spoilt military hardwares. At the end of hostilities, many of the Nigerian's infrastructure facilities were in critical position--especially in the Eastern states. For instance, the Niger Bridge head at Onitsha, Uli to Aba, Enugu to Umuahia, Ikot Ekpene to Uyo and many others were severely damaged and rendered unserviceable to people. Up until now, most of the roads in the Eastern states are still below their post war standards irrespective of the implementation of the second development plan.

On the other hand, new roads have been added to those repaired during the road rehabilitation period in 1970-74, e.g. Calabar Ikom Road, Benin -

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[26]Federal Ministry of Information, Nigeria Trade Journal, Vol. 22, No. 3, (Lagos: Academy Press, Ltd., 1975), p. 8.

Asaba Road and many others in Rivers State.

The category of damaged roads that are not repaired are mainly earth surfaced. These are mostly seen in Anambra, and Cross River States. The road from Okigwe to Enugu, Umuahia to Ohafia, Okot Ekpene to Itu Mbonuso are still "death traps."

(3) Acute Shortage of Indigenous Contractors: Although the oil boom in the country has awakened construction industry, most of the contractors are expatriates. This shortage of qualified contractors to handle Nigeria's construction causes a serious outflow of funds from the country, which in the long run, affects the unemployment rate of the country.

(4) Lack of Capital Input: Excepting oil, Nigeria's economic backbone was her agricultural or primary products--cocoa, palm oil and kernel, groundnuts, rubber, cotton, etc. These products are subject to price fluctuation in the world market, and their yields also change from year to year according to weather. These factors brought a low and unstable foreign exchange earnings to the country which consequently caused an unfavorable balance of payment. For instance, the total value of agricultural products in 1969-70 was 111.5 million[27], but in 1970-71, the estimated value of these products fell by 28 million.[28]

Such situations in the past hampered economic development in the

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[27] T. Woulter, "Nigeria, Option for Long Term Development," World Bank Country Economic Report, p. 57.

[28] Federal Ministry of Information, Nigeria Handbook (Lagos: Modern Publications, Nigeria, Nigeria Ltd., 1975), p. 51.

country and made Nigeria and other African countries depend almost solely on foreign aids and loans. Since 1969, the trend has been reversed. With the oil boom, the production of which jumped from .77 million barrels a day in 1963 to 2.3 million in 1974[29], Nigeria has emerged from a heavy deficit in the late 1960's to an encouraging surplus in the 1970's. Her external reserves increased from ₦ 129.8 million in 1970 to over ₦ 4 billion in 1975[30], while import and export values in 1976 were N 5,600 million and N 18,000 million respectively.[31]

Irrespective of the increase in foreign exchange earnings, this is not enough to cover the huge capital input required by the current third National Development Plan. The country needs more capital for such giant schemes as the road construction, free primary education, airport building, etc.; hence, the recent negotiation for loan from Chase Manhattan Bank of New York.

(5) Management Problems: One of the acute problems facing the country in all sectors of the development implementation is lack of efficient management. As Lt. Col. S. M. Yar Adua (Federal Commissioner for Transport) has pointed out, the former plans lacked good management and expertise.[32] Road construction as well as other infrastructures need good management and supervision. Where this was lacking, the result was much waste of efforts and

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[29] Federal Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1965), p.201.

[30] Federal Ministry of Information, Nigeria Handbook (Lagos: Modern Publications, Nigeria, Nigeria Ltd., 1975), p. 51.

[31] Embassy of Nigeria, Washington, D.C., Federal Nigeria Vol. 3, No. 1, (Washington, D.C., 1978), p. 21.

[32] Federal Ministry of Information, Nigeria Trade Journal Vol. 22, No. 3, (Lagos: Academy Press, Ltd., 1975), p. 8.

materials. The achievement in the former plans implementation could have been much higher if the government had had well-trained personnel to handle the projects.

Though there has been a slight improvement in management conditions since the 1970's, this is not significant. Inefficient management still remains the most intractable problem, especially in the public corporations. The same conditions prevail in the private corporations and companies that operate in the transport sector.

(6) Inadequate Road Traffic Regulations and Enforcement: The existing traffic regulations in Nigeria are inadequate, especially since police officers on patrol are allowed to stand on particular spots for vehicle checking. Drivers often exceed the speed limit as soon as they pass the police check-points. Again, the number of policemen and women sent to check traffic is often not enough to do effective work and even those arrested for violation of traffic laws are rarely taken to courts.

Private cars are sometimes used as taxis on the feeder roads, especially in the rural areas. Even in the cities, newly bought taxi cabs are driven as private cars and passengers are heavily loaded--exceeding the required number permitted by traffic regulations. Since the police are normally not permitted to check personal or private vehicles, unless suspected, this malpractice by taxi drivers continues in Lagos, Aba, Uyo, and other cities. The heavy investments in roads and bridges is not going to be of economic use to the nation--Nigeria--if there are no effective regulations regarding highway patrol, effective vehicle inspection, and mostly curbing the frequent appearance of highway robbers.

(7) Lack of Adequate Road and Railway Network in the Country: Road transport is the most important element of the transport system, both in terms of traffic and investment. It accounts for 77 percent of freight ton-mileage and 69 percent of public capital allocated to transport in the Second Development Plan.[33] As described above, Nigeria's road-net is small in comparison to the ever increasing population (over 80 million in 1976). Up until now, many areas are not served with even trunk "B" (state) roads. Such areas still suffer the hardship of transporting their agricultural produce to market either through human porterage or "beasts of burden"--camels, horses, etc., as was done in the pre-colonial era. An improvement in most of these remote areas is the use of bicycles which, as B. W. Hodder puts it, is playing an increasingly significant role in transportation of goods and passengers.[34]

In most southern states, where the land is plain, the use of bicycles forms the transport base of the rural areas. Goods are carried through this means from the farms to the few trunk roads where cars and lorries take over the journey to their respective destinations. Equivalent to this in the north is the use of horses and camels. Failure of the Bornu Railway extension to solve the transportation problem of Bornu area has resulted in the increasing use of these beasts of burden. The existing roads in the area are exceptionally few.[35]

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[33] World Bank Report, Nigeria, Option for Long Term Development ed. W. Tims (Baltimore: The John Hopkins University Press, 1974), p. 188.

[34] B. W. Hodder, Economic Development in the Tropics (London: Methuen and Co., Ltd., 1968), p. 194

[35] Reuben K. Udo, Geography of Nigeria (Los Angeles: U.C.L.A. Press, 1972), p. 49.

Today, with increasing economic growth and development, motorcycles are fast replacing bicycles. A common road traffic scene in Nigeria, especially at stop signs, is car-line up with motorcycles in between, ready to dart away in turns. This is preferred to bicycles, because of speed, but carries limited amount of goods too, and the accident rate is almost incredible.

As a result of implementation of the first and second Development Plans, the road network in the country has shown enormous improvements; but this is not encugh. Many areas are still not served by good roads, much less railways.

Akamkpa Division of the Cross River State is a case in point. Here roads are not only narrow, but have soft surfaces which make them easily washed and dug up by the tropical rains. The coastal areas around Nembe, Beguma, and Abonema of the Rivers State also suffer because of marship roads.

(8) Bottle-Neck and "Go Slow": Most of Nigeria's trunk B roads are one lane. The narrowness of these roads coupled with bottle-necks caused by narrow bridges results in high rate of motor accidents, especially trucks from the Northern states. Mr. G. E. Otobo, Chief Resident Engineer - Federal Ministry of Works, speaking about Lagos - Ibadan Expressway, referred to roads connecting Lagos as "death traps."[36] This is true particularly of Lagos - Ibadan - Kaduna road. Others are Lagos - Aba Road, Enugu - Port-Harcourt via Aba, Oron Ikot Ekpene Road, Owerri - Okigwe - Umuahia, etc.,

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[36]Federal Ministry of Information, Nigeria Trade Journal, Vol. 22, No. 3, (Lagos: Academy Press, Ltd., 1975), p. 14.

which all have high rates of motor vehicle accidents annually. Though there is no statistical data to show death toll caused by road accidents, it is estimated that more than 20,000 people die annually because of motorcycle, car, and other forms of road accidents. This is too high for a country with a population less than 100 million. Comparing this death estimate to those of some selected developed and developing countries of the world, it can be seen that Nigeria has lost a great deal of her human resources and machinery too, all because of poor roads. Table 3 shows motor vehicle deaths of selected countries.

Another great problem to Nigeria's city road users is "go slow". It is the narrow roads and insufficient network of roads in the cities that contribute to the sluggish car movements called "Go Slow." Another factor attributable to it also is the mass movement of people from the suburbs to the cities where employment opportunities and living standards are better. The City of Lagos, for example, had a population of 126,000 in 1931, and by 1963 the population had risen to 665,000,[37] and from there rocketed to about 3.5 million in 1977.[38] This rapid growth in population, which does not keep pace with road building and expansion, causes extreme congestion on the roads and the resultant go-slow.

As stated earlier, time wasting on the roads to work is so alarming that lateness in work places is no more punishable, but regarded as inevitable. The Federal Military Government therefore came up with an apparent solution of driving in turns--vehicles with even number plates (tags) driving some days, while odd number plates drive other days in a week.

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[37] Gerald K. Helleiner, Peasant Agriculture, Government, and Economic Growth in Nigeria (Homewood, Illinois: Richard D. Irwin, Inc., 1966), p. 429.

[38] Embassy of Nigeria, Washington, D.C., Federal Nigeria Vol. 3, No. 1 (Washington, D.C., 1971), p. 24.

TABLE 3

MOTOR VEHICLE DEATHS BY NATIONS

(Per thousand of population)

NATION	YEAR	DEATHS	RATE
U.S.A.	1974	46,402	22.0
England, Wales	"	6,372	13.0
Italy	"	12,140	21.9
Canada	"	6,325	28.1
Spain	"	4,751	13.6
Belgium	"	2,534	26
France	"	11,786	22.5
West Germany	"	14,242	23.0
Sweden	1975	1,236	15.1
East Germany	"	2,578	15.3
Japan	"	14,206	12.8
Nigeria	"	20,000	36.5
Denmark	"	849	16.8

Source: National Safety Council - Accident Facts, p. 71.

This worked well for a few weeks, but later on ran into problems. Congestion mounted again because people found some loopholes to by-pass the regulation. Even and odd number plates were acquired by individuals who then had to drive everyday without waiting for their actual turns. This made the regulation ineffective. Other cities like Ibadan, Kano, Enugu,

Port-Harcourt, Benin, etc., are fast developing into such acute go-slow situations, especially during the rush hours.

This time-wasting on roads computed in terms of money is an economic waste to the nation. Government workers as well as traders and other operating in the private sector suffer loss of time and favorable opportunities everyday. Many kinds of work are left incomplete because workers are conscious of queuing up early in order to reach home in time for dinner.

It must also be mentioned that Railway Line Development has been stagnant ever since the completion of Bornu Railway Extension in 1964. No laying of new tracks has been planned even during the current development plan (1975-80). This may be due to the inefficiency of the Nigerian Railway Corporation to run the existing lines (East and West) with a profit.

(9) Shallow Ports and Inadequate Shipping Facilities: As discussed in chapter one, many Nigerian Ports are blocked by silt, and therefore are shallow. The first National Development Plan (1962-68) had an allocation of ₦47.2 million while the second plan (1970-74) budgeted ₦37.5 million for Ports. The implementation of the first National Development Plan was interrupted by the Nigerian Civil War which caused heavy damages to Ports.[39] The second Development Plan effort was mainly concentrated in Lagos, Calabar, and Warri. Even then, not much dredging was done. Port-Harcourt still remains below its pre-war standard. Apart from the major ports like Lokoja, Onitsha, Koko, Burutu and many others, are shallow ports of which if dredged can serve the needs of Nigeria.

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[39]Federal Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1975), p. 221.

The post-war years, with economic growth resulting from oil revenue, have witnessed increased pressure on Lagos Sea Port. In the last five years, no less than 75 percent of all cargo tonnage handled by Nigeria went through Lagos. Other smaller ports with less capable facilities handle less. Large ships are unable to go to the delta ports since their approaches toward the inland is controlled by depth of water--at Escravos bar which is at present 4.42 metre chart Datum.[40] Lagos Port itself cannot take in heavier ships loaded beyond 19,000 tons of cargo.[41]

Apart from the depth problem of the Nigerian ports, modern facilities and sufficient berths are lacking. This berth occupancy limitation was tackled in the second Development Plan and the effort ended in the building of 18 berths for Lagos Ports. The increased volume of trade in the country outran the existing ports facilities in 1976, and culminated in the most serious port congestion ever recorded in the history of Nigeria. Lagos Port was so congested that hundreds of ships anchored outside the Port awaiting off loading for about four to six months before success. This was so alarming that many shipping companies dreaded going to Nigeria. Anyhow, the situation is now under control after government regulation on Lagos Ports. Yet more needs to be done to create more docks and other facilities, thereby easing the burden on Lagos Port. Table 4 shows the volume of trade handled by Lagos Port as compared to other ports.

Port congestion is a little bit controlled through programming of ships arrived. But yet the persistent increase of imports and exports continues

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[40]Federal Ministry of Information, Nigeria Trade Journal Vol. 22, No. 3 (Lagos: Academy Press, Ltd., 1975), p. 18.

[41]Ibid.

TABLE 4

CARGO HANDLED BY NIGERIAN PORTS

(000) Tons

YEAR	LAGOS	PORT HARCOURT	WARRI	CALABAR	TOTAL
1961	1,695	723	-	-	2,418
1965	1,975	815	-	-	2,790
1968	2,533	-	-	-	2,533
1970	2,599	102	-	69	2,770
1973	2,891	579	345	80	3,895
1974	3,049	738	267	50	4,104

Source: Federal Ministry of Economic Development, Third National Development Plan, p. 221.

to exert pressure on Lagos Port as whown by Table 4. The delay in the Port at times results in periodic congestions irrespective of the recent regulation. Such protracted delay has resulted to increase in import costs which are now charged by overseas shipping lines that run to and from Lagos.

(10) Lack of Sufficient Ferry Services to Serve the Inland Waterways: Nigeria is naturally endowed with several inland waterways. Apart from sandbars and dunes, the coastal lagoons and Delta creeks should be navigable with large ships from Benin (Dahomey) to Opobo. The Niger and Benue Rivers are navigable with barges or small boats all the year around as far as to Lokoja, and above this confluence town (Lokoja) during the rainy season. With small boats too, navigation is possible in the Cross River, River Ogun, Anambra and the rest.

But lack of sufficient ferry services in many areas has prevented the country from utilizing this vitally cheap transport system. Before the civil war, river traffic accounted for more than 300,000 tons of export annually in the early 1960's.[42] The war closed many of the Delta Ports, navigational aids ceased, the private expatriate firms withdrew since their companies were nationalized. The Inland Waterways Department of the Federal Ministry of Transport, which took over management from the private companies, has not done much to develop the river, much less purchasing many ferry boats.

Out of a total of ₦9.1 million allocated to inland waterways in the 1970-74 Development Plan, only new ferries and four buoyage vessels were bought for Lagos-Apapa route.

Furthermore, some areas are separated from their neighboring towns and villages by the existence of rivers. Such areas should not lack ferry boats to transport a substantial number of people to the other side of the river.

(11) Few International Airports and Lack of Night Flight Facilities: Nigeria has only two international airports--Lagos and Kano. Even these two airports have no modern night flight equipments, and therefore receive much more work-pressure during the day. Some fifteen international airlines provide service to Ikeja (Lagos) Airport, and the facilities there are inadequte to handle the traffic.[43] In 1970, total passenger movements at all airports was 576,000, compared with 436,000 in 1965, of which about

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[42] T. Woulter, "Nigeria, Option for Long Term Development," World Bank Country Economic Report, p. 195.

[43] Ibid.

100,000 thousand were domestic passengers.[44]

Now, the upsurge in the standard of living, the increasing economic well-being of Nigerians, the hazards and time consuming aspects of road transportation, have brought about the consciousness and increase of air travel in the country. A visit to any of the two international airports illustrates the fact that this growing country is in dire need of more modern international airports. But the Nigerian airways operating on its traditional capacity has been overtaken by the current growth in air traffic demand.

A feasibility study carried out recently shows that the recent expansion of the airways investment in aircrafts has not been accompanied by an increase in organizational, managerial, and technical skills. Nigeria still depends heavily on expatriate firms to effect major repairs to their aircrafts. It is this shortage in technical and managerial skill that contributes to narrowness in the airway operations.

The Federal Ministry of Civil Aviation has a huge plan under the Third National Development Plan. Six international airports have been planned and 19 national ones in all the state headquarters. Until this is accomplished, the pressure of day and evening flights continues.

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[44] Ibid.

[45] Federal Ministry of Information, Nigeria Illustrated (Lagos: Academy Press Ltd., 1977), p. 24.

CHAPTER 3

ADMINISTRATIVE AND OTHER PROBLEMS

Aside from the problems enumerated in the previous chapter, there are other ones, mostly administrative in nature, that plague the transport system of Nigeria. The following are the major types:

(1) Ineffective Role of the Transport Planning Unit of the Ministry of Transport: The Federal Ministry of Transport does not make effective use of the Transportation Planning Unit. For instance, there is no coordination between the Federal Ministry of Transport and its vital wing (T.P.U.).[46] Rather, this unit works more closely with Modal Agency, merely as an advisory body.

The T.P.U. in itself is weak and inefficient since it lacks competent personnel to handle its day-to-day operations. Programmed training in relevant courses is lacking, and therefore no real progress has been made by the Unit.

(2) The General Decline of the Railway System: The Nigerian railway has declined during the past twenty years. Its agricultural freight liftings have steadily declined from 850,000 tons in 1958-59 to 350,000 tons in 1970-71[47], with the only exception of 1963-64 when 381,000 tons were recorded.

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[46] Transport Planning Unit.

[47] Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1975), p. 213.

One of the major causes has been the steady decline in agricultural output especially in the north where drought has forced the farmers off their farms. Groundnuts and raw cotton which, in the past, contributed significantly to the total foreign exchange earnings of Nigeria, have completely disappeared from the export list since 1975.[48] These export crops formed a greater portion of the Railway traffic from the north to the Ports of Lagos and Port-Harcourt. The downward trend of the Railway performance in goods and passenger traffic is shown in Table 5.

TABLE 5

THE RAILWAYS' FREIGHT AND PASSENGER LIFTINGS, 1954-74

GOODS TRAFFIC

YEARS	TONNAGES (000)	TON-MILES (MILLIONS)	PASSENGERS (000)	PASS-MILES (MILLION)
1954-55	2,602	1,079	5,451	349
1959-60	2,803	1,250	7,881	358
1961-62	3,003	1,412	11,061	481
1967-68	1,868	986	6,916	247
1969-70	1,553	1,553	8,370	453
1970-71	1,604	982	8,942	611
1971-72	1,406	750	6,151	597
1972-73	1,670	344	5,819	640
1973-74	1,978	958	4,670	473

Source: Federal Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1975), p. 49.

As a consequence, the operating results of the Railways have steadily deteriorated from a ₦6.9 million deficit in 1965-66 to a ₦10.3 billion deficit in 1969-70. From there, the position continued to worsen further to

[48] Federal Ministry of Information, The Nigeria Trade Journal Vol. 24, No. 6, (Lagos: Academy Press, Ltd., 1977), p. 49.

1974. Operating deficit for the subsequent four years were ₦15.8 million, ₦22.2 million, ₦21.8, and ₦23.1 million for 1973-74.[49]

The following are the main factors that contributed to the Railways' decline in operating and finance performance:

(a) road competition, made more effective by huge sums of investment in the development plans.

(b) obsolete, inadequate railway equipment.

(c) the fall in railment of coal traffic due to step-up use of electricity, gas, and diesel oil in local industries.

(d) the serious effects of interruptions of railway services resulting from the thirty-month civil war.

(e) the serious effects of non-revision of railway tariff rates for eight years (1962-70) despite increased operating costs, salaries and wages, cost of materials, etc.[50]

(f) heavy interest charges on capital.

While the railways cannot be blamed for export-crops failure, the rest of the causes are attributable to inefficient management of the corporation. Its failure to complete effectively with the road transport is caused by limited capacity to carry goods and passengers at a considerable speed. The trains running speed does not exceed 64 kilometers per hour anywhere in Nigeria.

Because of its slowness, unreliability and inadequacy in goods transport service, the railway has lost to the road transport in bulk traffic.

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[49]Federal Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1975), p. 214.

[50]Federal Ministry of Information, Nigeria Trade Journal, Vol. 22., No. 3, (Lagos: Academy Press, Ltd., 1975), p. 23.

The rate charged should be an advantage, but its control of the goods and speed are limitations.

Another reason for failure of the railways to compete effectively with the road transport is partly attributable to long turn around times of rolling stock and insufficiency of available motive power. The recent railways' good wagon utilization has averaged six to 12 wagon-loads per available wagon per year, as compared to 30 to 36 thirteen years ago.[51] This poor utilization rate is mainly caused by an imbalance in goods flow up and down the country, with upward flow exceeding the downward flow.

A further problem of the railways is excessive time wasting at stations. This is not only annoying to the passengers, but also prolongs the journey. Excepting "Limited" that does not waste much time at stations, local trains call at every sub-station and stay for long periods before starting off. For instance, express passenger service from Lagos to Ibadan (192 kilometers) takes 5-3/4 hours, to Kaduna Junction - 24¼ hours, and 31 hours to Kano.[52] The journey from Umuchia to Enugu in the Eastern branch of the railways takes about six hours to run the 185.6 kilometers.

This time wasting at stations coupled with the railways' speed limit of between 16 to 64 kilometers makes journey by train a matter of the last resort. Alternative transportation is always preferred to the railway train especially if the journey is to be taken from East to West. Instead

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[51]Federal Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1975), p. 214.

[52]Nigerian Railway Corporation, Railway Public Time Table Ebute Metta), p. 20. Also Alan Sokolski, Establishment of Manufacturing in Nigeria (New York: Frederick A. Praeger, 1965), p. 129.

of going all the way to Kaduna in the north before turning down to the west, passengers prefer taking buses or taxi cabs which can complete the journey from Aba to Lagos in four hours instead of four days through the railway trains.

Other reasons for railways' slow speed includes such physical characteristics as extensive track curvature, light weight of rails, weak bridges, and steep grades.

(3) Communication Failure and its Effect on Operation and Control: Nigeria's communication system, up until now, is not smooth. External telephone calls from and to the country must be channeled through London. This process tends to waste time more than normal. Within the country, it is difficult to make a call between the cities since the lines are not generally clear.

The transport system therefore suffers this communication failure which in turn affects its operation and control. The Nigerian Railways, for example, suffer much of this communication failure since wireless equipments are not freely used. Very often, wires strung along the railway pole routes are stolen or may be subjected to such a degree of interference as to be ineffective.[53]

Electronic equipments which could be used to safeguard the transport lines from this awful situation of communication failure is not freely imported into the country. The Federal Military government has placed restriction orders on the importation of certain electronic equipment. The equipment includes probe microphones, wireless transmitting and receiving

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[53]Federal Ministry of Economic Development, Third National Development Plan, (Lagos: Academy Press, Lts., 1975), p. 215.

sets, mini-transmitters and so forth.[54] Consequently, the trains, taxis, and other road vehicles cannot report cases of accidents immediately to the appropriate quarters for emergency help.

The frequent occurence of highway robbers of "highway men", as they are popularly known in Nigeria, and often inability of the police to track them down is mainly due to poor communication. Sometimes these robbers break down the telegraph poles and disconnect the wires. Since the car or truck drivers have no wireless sets to send information to the police, their operation is always complete and they take off before the arrival of the police on the scene. Such incidence is rampant along Lagos - Onitsha Road, Abakaliki - Enugu Road, Ibadan - Kaduna Road, and even on sub-railway stations.

(4) Inefficient Operation of the Ports by Nigerian Ports Authority: Established as an autonomous public corporation in 1955, the Nigerian Ports Authority is responsible for the administration and operation of the country's six seaports: Lagos (Apapa), Port-Harcourt, Calabar, Warri, Burutu, and Koko. This corporation also monitors the operations of the private port of Sapele and the various oil terminals run by international petroleum companies. The Authority provides some marine services including piloting and towing, dredging and lighting maintenance. The average annual growth rate of general cargo (excluding petroleum) entering and leaving Nigeria between 1969 and 1973 was slightly over 8 percent.[55] Since 1973, however, enormous earnings from

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[54]Embassy of Nigeria, Washington, D.C., Federal Nigeria, Vol. 3, No. 1 (Washington, D.C., 1971), p. 24.

[55]U.S. Survey of Business Opportunity in Nigeria (1977), p. 107.

oil has tripled the growth rate of the country.

Irrespective of the above growth contribution by the Nigerian Ports Authority (NPA), its operation of the six important ports mentioned above is highly unsatisfactory. Efficient operations of the ports are frequently thwarted by an adequate collection and dissemination of internal information delays in customs clearance, congestion of ships in ports areas, shortage of operational equipments, and very high rate of cargo losses resulting from pilferage.

Ports congestion has been discussed in the previous chapter, but it must be added that part of the cause of ports congestion is brought by NPA. Delay in custom clearance is evidence of inefficiency, which helps to create further congestion in the Nigerian Ports. Such crowded affairs in the ports does not give the security guards ample chance of being extra vigilant, hence reported cases of pilfering.

(5) Lack of Organizational, Managerial, and Technical Know-how, and Over Dependence on Foreign Capital Input: Though Nigeria has trained so many managers both internally and in overseas countries, the number of experienced managers to man the key positions in the development project is still lacking. In Nigeria Airways Corporation, irrespective of the increases in the number of aircrafts, there are no native or indigenous trained managers, and no technicians to effect major repairs in case of any breakdown. Minor routine maintenance, however, is done locally, but the company still depends heavily on foreign technicians to effect any major repairs.[56] At present, the

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[56]Federal Ministry of Information, Nigeria Illustrated, Vol. 1 (Lagos: Academy Press, Ltd., 1977), p. 24.

airline employs several expatriate pilots on an individual contract basis. Until all these deficiencies are removed, the company cannot hope to compete effectively with their international counterparts in the airline industry.

The country's dependence for input of capital can also be shown during the implementation of the first National Development Plan (1962-68).

Nigeria depended heavily upon foreign aid as the main sources for reaching their projected target in the scheme. This was highly disappointing--foreign aid contributions could not reach the expected target and therefore failure to reach the planned goals or target was inevitable. During the first three years of the plan, firm offers received totaled ₦344 million in loans and ₦90 million in grants.[57] The total of ₦434 million was only two-thirds of the estimated foreign aid component of the plan.[58] Early critics of the plan, like O. Aboyade, who attacked the assumed foreign aid contribution as unrealistically large, were proven to have been correct.

Moreover, the stringent requirement of the donor countries, involving feasibility study, detailed negotiation of aid or loan terms, etc., limited the utilization period of the offers. As a result of such delays, during the first two fiscal years of the first plan, only 12 percent of the Nigerian public capital expenditure was financed by foreign aid. This proportion rises to 21 percent when technical assistance is included.[59]

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[57] Gerald K. Helleiner, Peasant Agriculture, Government, and Economic Growth in Nigeria (Homewood, Illinois: Richard D. Irwin, Inc., 1966), p. 341.

[58] Federal Republic of Nigeria, National Development Plan, Progress Report (Federal Ministry of Economic Development, 1964), pp. 30-32.

[59] Gerald K. Helleiner, Peasant Agriculture, Government, and Economic Growth in Nigeria, loc. cit.

The plan estimated 50 percent as foreign aid, while foreign aid revenue actually received in the first two years was only 17 percent of its target, and the total public program reached 57 percent of its target.[60]

With military "take over" of government, dependence in pure foreign aid ceased. But loan continued, with oil revenue pouring into the country, and Nigeria was able to stand financially on her own without hoping on the so-called aid.

The second and third National Development Plans' budgets are realistically dependent on oil revenue which is now almost ₦600 billion annually. Yet, to reach targets in the current development plan, loan is required. This year, for instance, Nigeria is currently negotiating for loans from Chase Manhattan Bank and Morgan Trust Company of New York and (London branch) respectively.

In addition, technicians and construction companies are mainly expatriates. Firms like Julius Berger, Dumez, Guffanti, etc., dominate all Nigerian contracts.

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[60] Ibid.

CHAPTER 4

THE THIRD NATIONAL DEVELOPMENT PLAN AND SOME SOLUTIONS

Owing to the above acute and numerous transport problems in the country, both federal and state governments are determined to do all they can to solve them. Nigerian policy makers are aware of the fact that a sound and efficiently run transport sector is highly essential for a balanced economic growth of the society. For success in other sectors, there must be a good and adequate road network, well developed ports with modern facilities, an efficient railway system with sufficient tracks, and modern air traffic.

Transport Policy

Nigeria's transport policy is still based on "State of Policy on Transport" of 1965 which advocated the coordination of transport development in the country. The root of coordinated transport policy is from the Stanford Research Institute's report on "Economic Coordination of Transport Development in Nigeria." But the objective of coordinated development was not realized. This, consequently, led to an addition of two more objectives--ensuring increased safety and the provision of safety to transport network users.[61]

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[61] Federal Ministry of Information, "Transport: Development and Future," Nigeria Trade Journal (Nov. 27 - Dec. 11, 1977), p. 22. Also Third National Development Plan, p. 199.

The overall operating performance and internal coordination of various transport subsectors has not been satisfactory. Up to the end of the Second Development Plan implementation, coordination of state and federal transport authority has been lacking.

In an effort to improve the situation, the Federal Military Government authorized studies of various problem areas with the intention of implementing the recommendations during the third plan period. The subsectors studied include trunk roads (1971-72), railway (1972), airlines (1973), and dockyards (1974).[62] Some of the problems common to all subsectors were spelled out in the report as follows: (1) lack of executive capacity; (2) inadequate capital structuring; (3) red tape and bureaucratic organization, etc. These problems have been taken into consideration by the Third National Development planners.

Priorities

Of all the economic sectors, the transport sector takes one of the "lion shares" of the available capital development funds. In the first development plan estimate, it absorbed about one-fifth of the capital outlay, one-third in the second plan (1970-74) and more than one-fifth in the third plan (1975-80).

In the whole transport sector, land transport is given the greatest priority in the current development budget, claiming 85 percent of the total estimate.[63] This includes road and railways. It is obvious that road

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[62]Federal Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1975), p. 199.

[63]Ibid.

transport being so elaborate and being used much more than the railway must take a greater share of the land transport allocation then the railways. Next in the priority hierarchy is the water transport with 7.5 percent, and lastly air transport - 7.2 percent. Table 6 shows the sub-sectored allocations and years of intended expenditure from 1975 to 1980.

TABLE 6

CAPITAL PROGRAM BY GOVERNMENTS AND ACTIVITIES (TRANSPORT) L

(₦ MILLION)

SUB-SECTORS	GOVERNMENT	TOTAL	1975-76	1976-77	1977-78	1978-79	1979-80
Roads	Federal	4,355.95	979.92	1,123.47	999.14	739.92	546.49
"	All states	984.47	210.79	254.05	223.15	178.18	118.27
Railways	Federal only	885.02	35.05	52.00	261.55	267.70	268.70
Civil Aviation	" "	476.98	59.63	100.56	126.80	83.85	106.14
Nigeria Airways	" "	50.95	12.60	18.75	10.10	8.00	1.50
Inland Waterways	Federal	47.54	9.90	12.16	11.18	8.69	5.59
" "	State	44.25	12.37	12.65	13.11	4.22	1.89
Maritime Service	Federal Only	13.73	2.26	4.07	3.30	2.30	1.80
Shipping	" "	118.09	17.82	33.37	26.30	20.30	20.30
Ports	" "	322.01	47.46	71.70	83.00	66. 40	53.45
Government Coastal Agency	" "	4.06	1.02	1.09	.87	.54	.54
Total-All States		1,028.72	223.16	206.70	236.26	182.40	120.17
Total-Fed. Gov't.		6,274.34	1,165.66	1,417.17	1,489.25	1,197.71	1,004.52
Grant Total		7,303.06	1,388.83	1,683.88	1,725.52	1,380.12	1,124.69

Source: Third National Development Plan, p. 200.

The transport system, under the Third National Development Plan is to be modernized. All federal (Trunk A) roads are designed to cope with vehicle running speed of 100 kilometers per hour; right of way width - 91 meters; width of pavement - 7.3 meters; 144.8 meter stopping sight, etc. All bridges must be at least two lanes.[64] Dredging of ocean and river ports

[64] Ibid.

including expansion must be carried out; the railway excepting the tracks must also be brought up to date.

The following are sub-sector plans, according to priority, set down by the Federal Ministry of Economic Development.

A. ROADS

The federal road program for 1975-80 Third Plan period involves a total road length of about 31,000 kilometers. Roads under construction are to be protected by alphattic outlay and carriage ways are to be added to those without for dwelling. The main features of the federal road program are as follows:

(a) Primary Trunk "A" Network: These are roads initially started by the federal government in the previous plans, plus new networks. A total of 14,487 kilometers of road at an estimated capital cost of about ₦2.52 billion is involved in this subsection. This includes Nort-South and East-West roads forming the basic grid of the national network, into which other subroads link. The roads featuring prominently Lagos - Ibadan Expressway, Ibadan - Oyo - Ilorin, Warri - Benin; Kaduna - Zaria - Kano; Onitsha - Enugu; Port-Harcourt - Enugu, etc. Federal roads can be categorized as follows:

(I) Projects for Asphalt Overlay: As a result of increasing development and traffic, roads constructed during the previous plan periods are to be further protected by layers of asphaltic concrete. This section of the road program covers 2,993 kilometers of road length at an estimated cost of

₦133.6[65] million. Some of the roads concerned are:

(1) Ilorin-Bakani-Kaduna

(2) Warri-Benin-Okene

(3) Benin-Asaba

(4) Kaduna-Zaria-Kano

(5) Nine Mile Corner-Otirkpo-Aliade-Makurdi-Jos

(6) Onitsha-Owerri

(II) Continuing Projects: These were the uncompleted road and bridge projects that must be finished in the third plan period. A total sum of ₦340.5 million is earmarked for this sub-program which covers 3,678 kilometers of road length. These are some of the roads concerned in this category:

(1) Ode Remo-Ibadan

(2) Kontagora-Koko-Jaredi

(3) Road Bridge at Jebba and Makurdi

(4) Lagos-Ibadan Expressway

(5) Lagos-Wewkoro-Abeokuta

(6) Okene-Lokoja-Kaduna

(7) Imo River Bridge

(8) Shagamu-Benin

(9) Nine Mile Corner-Oturkpo

(10) Gimi-Jos

(11) Beni Sheik-Maidiguri

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[65] Ibid., p. 206.

(III) New Projects: This constitutes link needs and others that are overdue for reconstruction. The allocation for this category of projects was ₦2.05 billion, involving 6,195 kilometers of road length. Examples of this road category are:

(1) Badagry-Ilaro Abeokuta-Iseyin-Kaima-New Busa-Birnin Yauri

(2) Kano-Daura-Kongolam

(3) Lagos Island ring roads

(4) Third Axial Road and bridge in Lagos

(5) Agwu-Oji River

(6) Gembu-Warwar-Jamtari-Mayo Belwa-Yoda Jimeta

(7) Port-Harcourt-Aba-Umuahia-Enugu

(b) Existing Trunk "B" Roads Taken Over by the Federal Government: Roads under this subsection are about 16,000 kilometers and their total estimate for the current plan period is ₦1.44 billion. This figure was tentative since a detailed study to determine priority lists for construction and maintenance was not concluded.

(c) Urban By-passes and Intra-city Fly-overs: This category embraces many of the country's urban centers that have developed in such a manner that the right of way of the federal roads are obstructed by private or even public property. Urban traffic congestion or go slow is therefore a common feature, especially in big cities like Lagos, Ibadan and the rest mentioned above. This problem is compounded by high speed traffic which should not go through those busy city centers. To obviate these problems, a program of urban by-pass has been worked out for 36 urban centers. The program involves

the construction of 451 kilometers of road length at an estimated cost of ₦87.4 million. It is also proposed during the current plan period to eliminate railroad crossings by the construction of fly-overs at strategic points, especially at state capitals.[66]

Twenty-three fly-overs, estimated to cost ₦33.1 million, are planned for towns outside Lagos during 1975-80 plan period. In addition, similar fly-overs and interchange projects are programmed for Lagos to cater for all the rail crossings and busy road intersections, especially the Yaba City Way level crossing and intersection, the Moshalashi Round about - Ikorodu Road, the Onyigbo level crossing and intersection, and the intersection at Maryland, at a total capital cost of ₦24.6 million.

(d) Miscellaneous Projects: One of the objects of road development program of the Third Plan is to increase safety and comfort of the users of transport facilities. An allocation of ₦37.15 million has been made for these miscellaneous projects, which include the installation of weight bridges, equipment and material for the proposed Highway management organization, the construction of lay-byes, the provision of guard rails, reflective guide posts and lane markings, and the conversion of mile posts to kilometer posts. The establishment of traffic census stations at various points along the road, and data processing facilities in the Federal Ministry of Works, are also included in this section of the program.

(e) Materials and Research: In view of the need for very detailed

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[66] Ibid.

investigation of local materials which can be used for road and allied construction works, the sum of ₦5 million has been estimated under the Third Plan, to cover the activities of the Materials and Research Division of the Federal Ministry of Works and Housing. A provision is also made to create a federal construction and road research institute to be quite distinct in functions from the Materials and Research Division. On the establishment of the institute, the Materials and Research Division of the Federal Ministry of Works and Housing will concentrate on the servicing of many construction projects in the Third Plan and on quick and ad hoc research projects at the preliminary and final design stages.

(f) Training: In order to bridge the manpower gap existing between the well-trained expatriate technicians and the mostly unskilled natives, two construction training institutes will be established between 1975-80. This is for the training of junior and middle level manpower. An estimate of ₦10 million has been allocated for the purpose.[67]

(g) Road Maintenance: To alleviate the burden of using dilapidated roads from the taxpayers and other road users, ₦138.6 million has been made for road maintenance during the plan period. The existing procedure whereby state Ministries of Works carry out maintenance of Federal Trunk Roads (A) on behalf of the Federal Government on Agency basis has been found highly unsatisfactory. This, in many cases, led to complete neglect of these roads,

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[67] Ibid., p. 207.

which eventually were completely worn down.

For the purpose of good maintenance, the country will be divided into 52 maintenance districts. The implementation of the program will start with two pilot districts situated in Bendel and Adamawa (North Eastern) states to be followed by a pilot district in each state. In addition, mobile breakdown units will be established to patrol the highways, which will have proper lay-byes for motorists.[68] A summary of the Federal Road Program is presented in Table 7.

TABLE 7

SUMMARY OF FEDERAL ROAD PROGRAMS 1975-80

		(₦ Million)
Total Federal Road Program		4,355.96
(a) Primary Trunk "A" network including:		
(1) Asphalt Overlay	133.58	
(2) Continuing Projects	340.50	2,518.94
(3) New Projects	2,044.86	
(b) Existing Trunk "B" taken over by Fed. Gov't.		1,440.00
(c) Urban by-passes and Intra-city flyovers		87.40
		58.87
(d) Miscellaneous Projects		37.15
(e) Materials and Research		5.00
(f) Training		10.00
(g) Studies, design and right-of way acquisition		60.00

Source: Third National Development Plan, p. 28.

The planned federal road projects shown in Table 7, if implemented, will indeed increase the number of good roads in the Federation of Nigeria

[68] Federal Ministry of Information, Nigeria Trade Journal Vol 22, No. 3 (Lagos: Academy Press, Ltd., 1975), p.13.

and in the long run will help to boost the economy of the country.

But the sum of ₦10 million estimated for manpower training is far too small to effect a sweeping from the expatriates managed roads to ones managed by the Nigerians. The need for efficient manpower for such a huge project cannot be overemphasized.

The training should not have been for junior and middle personnel only, but senior management personnel too. It is unfortunate that the training of such vital manpower needs long term investment, but at least provisions should have been made to include this for future betterment of the country.

Nigeria should not only aim at building two construction training institutes, but prepare for a larger intake of students.

STATE ROAD PROGRAMS

The bulk of Nigeria's road problems lies in the state and local roads. As explained in the second chapter, many areas are still not served by even one good road. But there is no sufficient fund to change the situation.

Roads handled by the state governments are classified as Trunk "B", and under the 1975-80 development period the state road program will require a total capital investment of about ₦984.48 million, and will involve 19,166 kilometers of essentially secondary and feeder roads.[69] These feeder roads are the trunk "B" roads that link the Federal network. About 9,796 kilometers (51.1 percent) are scheduled for full construction, while another 3,210 kilometers (16.8 percent) of the program is for improvement of

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[69]Federal Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1975), p. 208.

existing roads by widening, resurfacing, and straightening to cope with the increasing traffic. The remaining 6,160 kilometers (32.1 percent) will be built to all season laterite standard, to open up hitherto inaccessible areas of the country.[70]

A provision has also been made for the proper maintenance of the roads, acquisition of plants and equipment, etc. ₦18.96 million is earmarked for the above maintenance, while ₦6 million is allocated for weigh bridges to engender a more effective enforcement of traffic regulations.

The states' programs dovetailed into the national network, and the recent takeover of Trunk "B" roads by the Federal Government has further enabled the states to acquire more roads hitherto maintained by local government authorities. Table 8 gives a summary of states roads program in the Federation.

Benue Plateau State: The total capital expenditure for the state road projects is ₦93.96 million covering a road length of 2,417 kilometers. Of this total road length, up to 804 kilometers will have bituminous surface. For the bituminized roads, pavement width will be 7.32 meters, shoulder width 1.52 meters, and bridge 7.32 meters wide. The following are some of the major road projects in the state:

(I) Gboko-Ihugh-Andikpo-Jato-Aka Road: the 96 kilometers of road include a total span of 24.3 meters covering two bridges. The sum of ₦4.7 million is allocated.

(II) Katsina Ala-Jato-Aka-Kashimbila-Takum Road: the road stretching 75 kilometers ie estimated to cost ₦4.7 million including the building of six bridges.

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[70] Ibid.

TABLE 8

SUMMARY OF STATES ROAD PROGRAMS 1975-80[71]

(₦ MILLION)

STATES	TOTAL KILOMETERS	ESTIMATED TOTAL COST	1975-76	1976-77	1977-78	1978-79	1979-80
Benue-Plateau	2,417	93.960	14.39	20.47	24.62	21.62	12.86
East Central	1,755	86.89	19.21	19.38	18.61	19.72	9.75
Kano	1,043	55.34	9.64	11.18	10.96	13.52	10.04
Kwara	1,347	61.78	7.84	16.74	16.20	13.29	7.70
Lagos	573	31.26	6.13	7.41	6.85	5.84	5.03
Mid-Western	1,821	187.92	59.21	52.36	37.32	26.26	12.77
North Central	2,063	59.72	13.30	16.70	14.90	11.20	3.62
North Eastern	2,496	117.92	21.22	29.43	32.83	20.59	13.83
North Western	1,791	106.15	20.45	34.70	25.15	11.40	14.45
Rivers	296	41.14	13.65	12.00	7.95	4.90	2.65
South Eastern	990	67.06	13.04	18.33	11.68	12.95	11.05
Western	2,574	75.50	12.70	15.34	16.07	16.88	14.51

Source: Third National Development Plan, p. 209.

(III) Amper-Dengi-Basher Road: a sum of ₦7 million is estimated to this 112 kilometers of road

(IV) Wukari-Arufu-Abinsi Road: This road is 118 kilometers long with eight bridges which have a total span of 85.3 meters.

EAST CENTRAL STATE: Total road expenditure for the state[72] amounts to ₦86.7 million kilometers of road. Of this, 1,053 kilometers will be laterite roads, while 702 kilometers will be paved to 7.32 meters width. A few of

[71] This is based on the former 12 state structure of the country. Although the country recently legislated the creation of 19 states, implementation and alocation is still based on 12 states. Adjustment is arranged for by the Federal government.

[72] Anambra and Imo Now.

the road projects are outlined below:

(I) Udi-Agbani-Nguzu-Eda-Ohafia Road: This is 114 kilometer-road with 10 bridges expanding 201.2 meters. There will be asphaltic overlay to ensure durability. The capital cost is ₦6 million.[73]

(II) Nnobi-Ekwulobia-Umunze-Ibinta Road: This 46 kilometer road is to be paved with asphalt to protect its surface. The total cost of the project is ₦3.5 million.[74]

(III) Onitsha-Atani-Osomari/Atani-Ozubulu Road: This road is 46 kilometers long. Asphaltic overlay is planned at a cost of ₦4.4 million, including four bridges.

(IV) Nsube Nkwele - 7th Mile Corner at Ogidi: The project cost is ₦2.5 million to cover bitumen surface pavement of 46 kilometers of road. The cost includes 91.4 meters of bridge span.

KANO STATE: This state road program has a total allocation of ₦55.34 million for length of 1,043 kilometers of bituminized roads. Pavement and shoulder will be 7.32 and 1.53 meters respectively. The following are a few of the principal road projects:

(I) Gumel-Gagaraw-Jahun Road: This road is to be built at an estimated cost of ₦5.4 million.

(II) Karaye-Rogo Road: The 34 kilometer road is to be constructed at an estimated cost of ₦1.68 million.

(III) Garko-Rano Road: A total sum of ₦3 million is allocated for a road legnth of 61 kilometers.

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[73] Federal Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1975), p. 209.

[74] Ibid.

(IV) Gwazo-Bichi Road: Here the road length of 59 kilometers is estimated to cost ₦2.9 million.

KWARA STATE: Road program in this state is estimated at ₦61.8 million. This allocation covers new construction and repair of existing roads during the 1975-80 plan period. Total road length is 1,347 kilometers of which 936 kilometers will be full construction while 411 kilometers will be for road repairs. Some of the important roads are listed below:

(I) Babana-Lumn-Shagunu Road: The road is 77 kilometers long and the estimated construction cost is ₦4.8 million.

(II) Kotonkarfi-Abaji Road: This road length is 64 kilometers and the allocation - ₦4 million.

(III) EiyenKorin - Bode Sadu Road: The 99 kilometer road has an estimated cost of ₦6.2 million.

(IV) Kabba-Ohakiti - Ogamma Road: This is a 5 kilometer state road linking western with Kwana states. A sum of ₦3.1 million has been allocated for this project.

LAGOS STATE: The state road program covers 573 kilometers at capital cost of ₦31.27 million. The main project is Lagos Lekki Road and the rest of the fund will be spent on improvement of the urban roads.

MIDWESTERN STATE (BENDEL): Road project for the state covers 1,821 kilometers at a cost of ₦198.9 million. All the roads are designed to have pavement width of 7.32 meters and shoulder width of 2.75 meters. All roads have a soil cement base and some will have asphaltic surfaces for durability. Some of the major road projects include:

(I) Benin-Ekpe-Urhonigbe Road: The road length is 112 kilometers and its construction cost is ₦12.8 million.

(II) Kwale-Aboh Road: The construction of this 35 kilometer road will cost ₦8.3 million. Other roads are Ohoro Bomadi, estimated cost of which is ₦6.8 million, and Ojobo-Gbekolo Road.

NORTH CENTRAL: Road length for the state covers 2,063 kilometers at an estimate cost of ₦59.7 million. 1,120 kilometers will be improved and 275 kilometers constructed at good laterite standard. The main roads affected are:

(I) Katsina - Shargalle Road, involving construction of 176 kilometers of road at an estimated cost of ₦9.5 million.

(II) Dutsinai - Makarfi Road: The cost of construction is ₦5.1 million. Others are Manchok Station-Saminaka Road, and Kwoi-Jere Road.

NORTH EASTERN STATE: The total size of the state road project is estimated to be ₦118 million for 2,496 kilometers of road length. Of these, 208 kilometers will be constructed to modern Trunk "B" standard, while 2,288 kilometers will be laterite roads. The major roads are:

(I) Kanawa - Junction A345 Road: The sum of ₦7.1 million is allocated to this 128 kilometers road.

(II) Gombe-Darazo Road: (130 kilometers) The cost for this road is ₦11.62 million.

(III) Garba-Amper Road: (136 kilometers) costing ₦4.3 million.

NORTH WESTERN STATE: The length of the roads programmed for the state is 1,791 kilometers, at a total cost of ₦106.2 million. Some of the major roads are as follows:

(I) Gusau-Udara Road: Construction cost will involve ₦16.5 million.

(II) Bida-Minna Road: This is 117 kilometer road. Others are Bwi-Kamba Road and Bunza-Koko Road costing ₦10.2 and ₦7.4 million respectively.

RIVERS STATE: The Rivers State Road program covers 296 kilometers at a cost of ₦41 million. Like the rest of the new roads in the Federation, all the proposed roads will be overlayed with asphalt. Four of its major roads are:

(I) Mbiama-Yenegoa: 19 kilometers with 10 bridges. The project estimate amounts to ₦3.5 million.

(II) Chara-Bonny-Bomu Road: This road is 35 kilometers long, with three bridges. The total cost is ₦4.6 million.

The other two projects are Kaa-Akwale, Emuha-Kolo Creek Roads. Both roads cost ₦11.1 million.[75]

SOUTH EASTERN STATE (Cross River): A total of 675 kilometers is programmed for bituminization and 315 kilometers for laterite in the Third Plan period. Its cost estimate is ₦67.1 million, and the major roads are:

(I) Itu-Itam-Uyo Road: This road is 29 kilometers long. An allocation of ₦3.6 million is earmarked for it.

(II) Ogoja-Obudu Road: This is 51 kilometers and receives an allocation of ₦3.2 million, including bridge works.

Calculated from Third National Development Plan, p. 212.

(III) Iyahe-Aliade Road: 32 kilometers long. Construction cost is ₦4.0 million.

(IV) Osomba-Ikom Road: The road length is 64 kilometers and the project cost is ₦8 million.

WESTERN STATES (OGUN, OYO, AND ONDO): The western states road program is to cost ₦80 million covering a total road length of 2,574 kilometers. Of this, up to 1,997 kilometers is for improvement of the existing roads, while new construction covers 577 kilometers. Some major roads in these states are:

(I) Ibadan-Oshogbo Road: 92 kilometers and the cost is ₦4.5 million.

(II) South-West-North Ring Road: Here construction and widening is aimed at. The cost of the road is estimated to be ₦3.6 million.

Others are Emure-Ishua Road, and Abeokuta-Asha Road.

IMPLEMENTATION OF THE ROAD PROJECTS (1975-78)

The above states and Federal road projects are impressive. What really matters as far as the economic growth and general progress of the country is concerned, is not the impressively outlined document, but the implementation of these programs. So far, the first and the second years of the program were spent on ordering of materials, land acquisition and awarding of contracts. As Lt. General Olusegun Obasanjo, Nigeria's Head of State, puts it: "Although the greater part of the year (1976) was spent on choice of technical partners, project sites, placement of orders for machinery and equipment, a number of concrete achievements were also recorded."[76]

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[76]Embassy of Nigeria, Washington, D.C., Federal Nigeria, Vol 3, No. 1 (Washington, D.C., 1971), p. 8.

The real take off took place in 1977 when work started in nearly all the road projects. Pagos-Ibadan Expressway, which started in October, is nearing completion,[77] while others like Port-Harcourt Enugu, Onitsha Port-Harcourt Roads have just started. One of the pitfalls in the construction of the Nigerian roads is the drainage system, especially in the cities. For example the Eyo Edem Street construction which is still under construction was flooded by water which dug up the street road almost to the middle in July, 1977. That portion of the street was said to have been completed.

The open gutter system with poor drainage does not only give rise to stagnant pools of water which pervade the cities with obnoxious smells, but also causes accidents. Though this is not the case in all city's street roads, Lagos and Port-Harcourt and Calabar are cases in point.

On the other hand, excellent construction work is almost completed in many areas, e.g. Lagos, Ibadan Road, Lagos-Kaduna, Calabar-Itu, and others. It is hoped, with oil money still flowing into the country much, that road construction will be accomplished.

RAILWAYS

As mentioned in chapter two, Nigeria's Railways, managed by the Railway Corporation, is declining at a tremendous speed, giving way to improved road transport. Implementation of the 1970-74 program concentrated on acquisition of locomotives and rolling stock which absorbed a capital outlay of ₦18 million. Even then, the number of passengers carried deteriorated from 3,819 in 1972-73 financial year to 4,670 during 1973-74 period.[78]

G. E. Otobo, Federal Ministry of Works, Nigeria Trade Journal, Vol. 22, No. 3 (Lagos: Academy Press, Ltd., 1975), p. 14.

Federal Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1975), p. 214.

However, in the present plan period (1975-80), it is the government objective to improve the Railway Services and operations. In order to provide the country with a railway system that will meet the challenge of a rapidly growing economy, new road-bed and track systems will be constructed. The new line will be 1.435 meters or 4 feet 8 inches.[79]

In order to fulfill the above objectives, a total of ₦885 million has been allocated for the railway system during the current plan period (1975-80). Out of this ₦171.1 million will be used to keep the existing system operating, while ₦713 million will be spent on the first phases of the new track construction. Below are the main features of the railway program.

(1) Track Improvement: The total length of 3,484.8 kilometers of rail track in Nigeria contains more than 1,600 curves of between 4 and 10 degrees. In addition, steep gradients limit trains' speed. The improvement program is mainly to correct or eliminate these problems.

(2) Improvement of Communication: The main aim of this program is to improve pole route, and develop microwave communication. A total of ₦3.2 is provided for this project.

(3) Building of Platform and Shelter: ₦1.1 million is allocated for these constructions to shelter passengers.

Other railway projects include: new headquarter building, marshalling yard, main station buildings, building of new workshops, buying of locomotives, and rolling stocks.

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[79] Ibid.

The implementation of the railways program is comparatively slower than the road programs. Up until now, no new tracks have been laid. The said improvement on the existing tracks which was scheduled to be completed in about 15 years have not been significantly started.

The only part of the project that is so far carried out is purchasing of more locomotives and rolling stock. As for the rest of the items in the program, nothing has been done.

The plan made no provision for stamping out delay in sub-stations by passing trains. Again, there was no enforced regulation for tracking down the robbers in the railway stations.

AIR TRANSPORT

During the present Plan Period (1975-80), Nigeria Airways will concentrate its development efforts on expansion of domestic and African regional services. There will be general improvement of all the existing airports and the construction of more to cope with the services in all the nineteen states. Navigational aids and other civil aviation facilities will be provided. Communication will also be improved. For the safety of aircrafts operation in the country, national radar is to be introduced.

Compared to 1962-68 plan period which allocated only ₦7 million to airways, the third plan has an allocation of ₦51 million for the Airways program. The main projects are:

(1) Purchase of aircrafts: This project involves the purchase of seven medium haul jet aircrafts for domestic and African regional flights. The total cost of this will be ₦35 million.

(2) Lagos and Kano Airport Hangars: Up until now, maintenance of the Nigeria's Aircrafts cannot always be done locally due to lack of facilities. Therefore, the Nigeria Airways Corporation, during this plan period proposes to install in Lagos and Kano new hangars to provide the necessary facilities for more local aircraft maintenance. A total of ₦2.5 million has been earmarked for this purpose.

(3) Booking Centers: Provision is made, during this 1975-80 period, to construct new booking centers, including residential accomodation for station managers at Warri, Benin, Ibadan, Yola, Calabar, Port-Harcourt, Sokoto, Kaduna, and Ilorin. The total cost, including that of Lagos, is ₦4.5 million.

(4) New Head Office: To relieve the acute congestion in the existing head office at Ikeja Airport, a new one is to be built outside the airport. The cost of this project is estimated at ₦4 million.

It is the government's objective for the 1975-80 development plan period to provide sixteen airports.[80] Twelve were for the former state capitals, while four were to be international airports serving the big commercial cities. These international airports will be capable of taking the heavier medium haul jets carrying cargoes and passengers to Nigeria, now only handled by Kano and Lagos Airports. A total of ₦394.6 million has been allocated for this project.

In addition to the airways allocation, a total of ₦700 million has been estimated for airport development and so far, ₦400 million has been used.[81]

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[80] Adebayo Thompson, "Transportation: Development and Future," Nigeria Trade Journal (November 27, 1977), p. 23.

[81] Ibid.

At present, work is in progress at Port-Harcourt, Ilorin, Maidugari and Kaduna airports. It is hoped that Port-Harcourt Airport will be ready by April, 1978, while the other three will be ready for use in 1978. Other domestic airports undergoing construction during this plan period are Calabar, Jos, Enugu, Benin, Warri, Zaria, Gusau, Yola, Ibadan, and Sokato. Each of these airports will be able to accomodate the medium haul jet aircrafts.

Of these airports, Enugu is the first to be completed and has been officially opened for traffic. The Ministry of Civil Aviation has already bought modern equipment at a total cost of ₦13.9 million to be installed soon in the developed airports.[82]

With the installation of this modern equipment, air communication and landing, especially in the nights, will no more be a problem. Safety and expeditious flow of air traffic will ease the present bottle-neck affairs in Nigeria's air traffic.

To eradicate the present area of acute deficiency in engineering and maintenance, intensive training opportunities are being explored for all levels of staff of Nigeria Airways and Civil Aviation Division. However, not much has been done in this direction.

Much of the weaknesses of the airlines in technical and managerial personnel is easily illustrated through delayed bookings, flight, and theft at the airports. The Nigerian public write daily in the national newspapers calling for improvement in the Nigerian Airways operations.[83]

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[82]Federal Ministry of Information, Nigeria Illustrated (Lagos: Academy Press, Ltd., 1977), p. 25.

[83]Ibid.

WATER WAYS

Established in 1955 as an autonomous public corporation, the Nigerian Ports Authority (NPA) is responsible for administration and operation of the country's six seaports--Lagos, Port-Harcourt, Calabar, Warri, Burutu and Koko. The NPA also monitors the operations of the private ports of Sapele, and other various oil terminals run by international petroleum companies. Its major operations are in the six main ports where a total of 29 deep-water berths have been constructed before 1975. Of the number of berths, 18 are in Lagos.

As pointed out earlier, Lagos and the other smaller seaports have been congested due to increased volume of trade in this rapidly growing country. In order to avert this continuing ports congestion, a bold port development program is envisaged for 1975-80 plan period. The implementation of the 1970-74 development plan which could have taken up ports expansion was delayed owing to protracted investigations.

However, a total capital expenditure of ₦322 million is allocated for a ports development program in 1975-80 plan period.[84] Expenditure for the inland waterways system will exceed ₦47 million.[85] Equipment to be bought includes navigational aids, barges, tug boats, dredges and cars and passenger ferries. The highlights of the projects are as follows:

(1) Lagos (APAPA) Port: Six additional berths are to be built at Apapa including a container terminal, four transit shades, four warehouses, and the purchase of mechanical handling equipment. The estimated cost of

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[84] Federal Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1975), p. 222.

[85] U.S. Department of Commerce, U.S. Business Opportunities in Nigeria (New York, 1977), p. 107.

this project is ₦75 million. A provision has also been made for the development of an alternative port to Lagos. A separate allocation of ₦40 million has been made.

(2) Warri and Calabar: In each of the ports, four berths and an office block are to be constructed. ₦27 million has been allocated for Warri while ₦16.5 is for Calabar.

(3) Port-Harcourt: The major project is this second biggest port of Nigeria includes extension of deep water facilities to provide 300 additional meters of deep water berthing facilities. A total of 1,000 meters of quay length will be developed.

(4) Port of Koko: The major project to be carried out in Koko Port is almost the same as in Port-Harcourt. ₦14 million has been allocated for deep water berthing and port expansion.

(5) Bulk Handling and Equipment for Cement and Coal: As a matter of urgency, facilities for handling bulky import and export goods, such as cement and coal are to be provided in areas around Lagos and Port-Harcourt. A provision of ₦12 million is made for this vital project which, when completed, will help to channel away the heavy import and export flow into Lagos Port, thereby reducing the chance of congestion.

Other pivotal projects in this sub-sector include dockyard development, warehouse buildings, streets and federal office buildings, etc.

THE NIGERIAN NATIONAL SHIPPING LINE

The Nigerian National Shipping Line (N.N.S.L.) was established in 1958 and became government owned in 1961. The company operates ocean liner services to the United Kingdom, the continental and Mediterranena ports. The

Second Development Plan (1970-74) provided only ₦6 million for the replacement of aged boats, and two used boats were bought (the Cross River and the Congola).[86] This raised its total fleet to sixteen. Even then, the company was only able to carry seven percent of Nigeria's traffic.[87]

It is the government policy during this current development plan period (1975-80) to enable the company (NNSL) to carry about 30 percent of Nigeria's traffic by 1980. Emphasis is laid on the expansion of its traditional operation with the United Kingdom and other continental ports. To achieve all these goals, a capital investment of ₦118.1 million is planned for NNSL.

Most of this will be spent on purchasing 20 new vessels, 16 of which are to be combination of conventional/container cargo ships. Expenditure will also be channeled toward staff development and office and residential buildings.

INLAND WATERWAYS

The management of inalnd river routes is the responsibility of Inland Waterways Department of the Federal Ministry of Transport. The Second Development Plan (1970-74) revenue allocation for its general activities amounted to ₦9.1 million. Implementation was slow in the first three years; consequently, not much was achieved excepting the delivery of three new ferries for Lagos-Apapa route.

To promote efficiency in the use of the nation's inland waterways, an allocation of ₦75.5 million has been earmarked for this purpose. In addition

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[86] Federal Ministry of Economic Development, Third National Development Plan (Lagos: Academy Press, Ltd., 1975), p. 224.

[87] Ibid.

to this, the states' total allocation to this inland water transport amounts to ₦44.5 million. Activities will be centered in crafts replacementment - ₦4.73 million, dredging and river improvement - ₦6 million, river and flood basin mapping - ₦5.0 million. Provision is also made for three passenger car ferries with capacity for 50 cars each at Calabar, while eleven are planned for Lagos Lagoon. A summary of national inland waterways development program is shown below:

TABLE 9

INLAND WATERWAYS CAPITAL PROGRAM 1975-80 N MILLION

GOVERNMENT	TOTAL	1975-76	1976-77	1977-78	1978-79	1979-80
FEDERAL	47.54	9.90	12.16	11.1	8.69	5.59
STATES						
Benue-Plateau	5.03	2.2	2.20	0.63	-	-
East Central	2.03	0.50	1.00	0.53	-	-
Kwara	2.21	0.68	1.00	0.53	-	-
Lagos	5.00	0.10	0.10	2.00	1.80	1.00
Mid-Western (Bendel)	12.08	4.40	4.20	2.68	0.60	0.20
North-Eastern	2.03	0.50	1.00	0.53	-	-
North-Western	2.03	0.50	1.00	0.53	-	-
Rivers	10.50	2.35	1.10	5.10	1.35	0.60
South-Eastern	1.12	1.05	0.40	0.28	0.17	0.02
Western	1.22	0.09	0.455	0.30	0.30	0.07
TOTAL - ALL STATES	44.25	12.37	12.65	13.11	4.22	1.89
TOTAL - ALL GOVERNMENTS	91.79	22.27	24.81	24.29	12.91	7.49

Source: Federal Ministry of Economic Development, Third National Development Plan, p. 226.

This sum is quite for general development of the Nigerian Ports. But the program covers less than a half of the country's water transport poten-

tials. There are inland waterways that have not been sufficiently explored in the country, e.g. Oron, Ifiayong, Ikoneto and areas around Sapele, all in Cross River and Bendel States respectively.

The Federal Ministries of Economic Development and Transport are quite aware of this, hence the long term contract study of the Nigerian ports and waterways was awarded to NEDECO, a Netherland company from Hague, in February, 1971. The main aim of this study was for a long term development of Nigeria's ports between 1970 and 1990.[88]

Irrespective of the economic development plans and their implementations, inadequate staffing is still a major problem in the administration and operation of some ports. Port-Harcourt is still below its pre-war standard mainly because of continuing problems of getting skilled labor from Rivers State to fill the gaps left by the Ibos during the Civil War.[89]

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[88]World Bank Country Economic Report, Nigeria (1974), p. 193.

[89]Ibid.

CHAPTER 5

RECOMMENDATIONS AND CONCLUSIONS

Although the Third National Development Plan and the previous plans have arrived at some solutions to Nigeria's transport problems, many other problems have not yet been provided for. To address these problems, the following recommendations are suggested, starting from short range projects which require immediate implementation without significant capital outlay, to those costly ones which can only be achieved in the long run:

(I) Grass instead of trees should be used for highway beautification: The use of tree-planting along the roads should be avoided for fear of motor accidents. Grass should be planted soon after the roads' construction. This does not only beautify the highways, but also checks erosion.

(II) Modern geometric design should be adopted: Most Nigerian roads are routed through residential corridors, while others follow the existing pathways. The avoidance of valuable property causes road meandering and in some cases such property as buildings, cocoa ports, etc., are destroyed. The demolished buildings and other property destroyed by the road builders are paid for by the government. This does not only increase construction cost, but also encourages bribery. Property owners who do not want their wealth tampered with unscrupulously influence the surveyors, who in turn curve the roads away.

Similarly, the expansion of old or existing roads results to the same thing described above. On the other extreme, people who want to claim heavy

amounts of money from the government start concrete buildings on close to the roads and thus, claim the money when the building is destroyed. Such was the case in Aba-Oron Road expansion in 1971. On the other hand, Benin-Asaba Road, which was designed with modern equipment and independent of old track, is highly commendable.

(III) More road maintenance: The condition of the present road network of Federal (Trunk "A") roads ranges from good quality, 60 centimeters wide roads (Kaduna-Zaria; Benin-Warri; Onitsha-Enugu) to extremely poor stretches between Kabba and Ilorin.[90] The surface of the later road is extremely worn out because of poor maintenance. Other poorly maintained roads include: Jos to Maiduguri, Ikot-Ekpene to Oron, Abakaliki to Ikom, Umuahia to Owerri, and the rest.

More road employees should be hired for federal, state, and county roads. The heavy sums of money spent in road projects would be wated if the completed roads are not maintained.

The Ministries of Work and Transport should establish road maintenance divisions solely in charge of patrolling and locating the weak spots on the road. These should be repaired developing into potholes. Asphalt paving machines should be used for quick and durable repairs. The use of roadside boiling of coal-tar by untrained road laborers and unskillfully pouring on the road surface should be discontinued.

(IV) Sidewalks for city roads: Lack of sidewalks for city pedestrians have caused many tragic deaths in the cities as the pedestrians try to make their ways through the heavy traffic. This happens at Calabar, Port-Harcourt,

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[90] World Bank Report, Nigeria - Option for Long Term Development (Baltimore and London: The John Hopkins University Press, 1975), p. 189.

Zaria, Lagos, Ibadan and many other Nigerian cities.

Sidewalks of about 15 centimeters should be provided in order to ensure the safety of pedestrians, especially children. Crosswalks and stop lights should be used to regulate traffic.

(V) More enforcement of traffic regulations: There is a great deal of laxity in enforcing traffic regulations in Nigeria so much that taxi drivers and other cars can carry more passengers than they are legally authorized. Speed limits are always exceeded, and other traffic offenses committed. As mentioned earlier, the practice of checking at particular spots is ineffective and often leads to the use of bush tracks to by-pass the police checking points.

New regulations should be made whereby police patrol is intensified. The number of police officers should be increased so that all major roads have enough patrol officers who actually drive within the traffic-checking to see that law and order is maintained.

Modern communication equipment should be used for easy sending and receiving of messages from the Police Headquarters, ambulance offices, etc. The highway should be kept clean, and the wrecked cars, trucks and other vehicles be removed by a unit of the patrol men. Unscrupulous police officers who accept bribes and release perpetual traffic regulation violators should be dealt with.

(VI) Intensified training program: Although there has been some improvement since 1970, management remains the most intractable problem of the public corporations and private companies operating in the transport sector. Administration and operations of the Railway Corporation, Ports Authority,

and other private companies are hendled mostly by aged people. This results in deterioration instead of improvement in these sub-transport sectors.

For future efficiency, young Nigerians should be trained to replace the old inefficient and retiring personnel. Despite the fact that the former Nigerian Head of State, the late General Murtala Mohammed, did a good work of retiring most of the old people, some of them who were not affected still cling to their key positions. Infusion of new management methods is highly essential, for not only for the transport sector but for the general economic growth of the nation. Without success in this sector (transport), agricultural and industrial sectors cannot succeed since the marketing of their products depends upon transport systems.

(VII) Good drainage system should be adopted: The present open gutter system with poor drainage is not only a breeding ground for mosquitoes, but also a death trap for motorists. For instance, in Lagos, nearly all the city streets have open gutters with stagnant pools which pollute the air with obnoxious smell. This is highly indecent and unhealthy.

Close gutter systems with underground drainage should be adopted. This makes for a wider use of the roads and also reduces accident rates. Drainage pipes should connect the underground gutters, and culverts should be provided in all grades of roads including trunk "C" (county) roads.

(VIII) Provisions should be made for thicker pavement: Roads in Nigeria have very thin pavements, even the newly constructed highways. Such light pavements cannot resist the sticky heat of the tropics and the torrential downpour of rains. As a result, potholes frequently occur soon after construction.

Thick pavement of about 33.02 centimeters, depending upon weight of vehicles that use the roads, should be built. As the country is fast developing, the use of heavy trucks is undoubtedly increasing very rapidly. Therefore, it is necessary to provide adequate roads that will last for years without much repair.

(IX) Construction of more "flyovers" or overhead bridges: The population of Nigeria is growing very rapidly. From about 31 million in 1953, the Nigerian census figure rocketed to over 80 million in 1973, with a population drift from the rural areas to the towns and cities. This makes the cities overcrowded and in many cases impedes traveling.

Congestion and the consequent slow-down of traffic movement in Lagos, Ibadan, and other cities is caused by lack of proper outlets. Therefore, more overhead bridges with six lanes should be built in the future, possibly in the new capital of Nigeria which will soon be built. The two lane bridges built by Julius Berger in Lagos are too narrow to cope with the volume of traffic in this evergrowing city. Roads should also be expanded to at least four lanes. This will ease the road bottle-neck and free the traffic from congestion.

(X) More trunk "B" roads: The existing feeder roads called "laterite roads", no matter how well constructed, face severe erosion, especially in the south during the rainy season. If the surface is bituminous, these roads will last longer and serve the needs of the farmers, who after hard manual labor on their farms, have to transport their produce. At the moment, trucks cannot ply the roads since they are always marshy or dilapidated during the wet seasons.

RAILWAYS

(I) New Routes: It is obvious that the development of modern road transport has turned people's attention away from the railway trains which are comparatively slow and time wasting. But the traditional intention for building the railway, that is to transport agricultural goods to the coast, is not dead. The role of the railway in conveying these primary products (cotton, groundnuts, kola nuts, etc.) and other bulky goods has by no means been completely substituted.

New routes should be built with modern locomotives and the present deficiencies of the Railway Corporations in staff, trains' speed, revenue collection, should be removed. Railway extension, in future, should be made to serve such ports as Sapele, Oron, and Calabar. This, however, will ease the burden of road trucks in these areas.

(II) Overhaul the Railway System: The Railway should concentrate on hauling bulk cargo over long distances and leave short haul traffic to road transport. Efforts should be made to have constant checks of the side-lines. Several of the small branchlines, which have slim prospects of efficient economic operations, should be closed, for example, Minna-Baro branchline. But until the recovery of the transport in this area is ascertained, it should be allowed to operate.

(III) Management and Personnel Improvement: Major investment priority should be given to railway management. The present deterioration of the railway system in the country is mainly attributable to poor management. It is the work of management to see to the elimination of deficiencies in the system. Old trains, time wasting at main and sub-stations, can easily be

eliminated through regulations. Communication facilities can be stepped up as well as train speed. Sharp curves and steep gradients that at the moment hamper the speed of the trains can also be corrected to required standards.

As a matter of urgency, the Nigerian Railway Corporation should be completely remodeled. Regular training schemes for middle and higher management personnel should be scheduled so that regular movement of staff to the executive management level can be effected while the old people are retired.

When this is done, the corporation will (compete) the ever growing road transport. Passengers using the railway will increase and the corporation's annual deficit will diminish.

AIRWAYS

The Nigerian Airways Corporation is making tremendous progress. This can be seen in its present international operations described above, and its joint venture with Pan American Airways (Pan Am). Now it has a fleet of 20 aircrafts including one DC 10-30, two Boeing 707's, two Boeing 737's, seven Fokker 28's, and seven Fokker 27's. On order are one Boeing 707, two Boeing 727's, and one DC 10-30.[91] Its profit margin is also wide.

But even then, the volume of traffic and the general development in the country outweigh the present airways capacity to handle this traffic. Therefore the following should be done for further improvement:

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[91]Federal Ministry of Information, Nigeria Trade Journal, Vol. 24, No. 3 (Lagos: Academy Press, Ltd., 1977), p. 23.

(I) More Airport Construction: To cope with the present volume of trade and travel in Nigeria, more airports should be embarked upon during the next plan period. Expansion of the existing airports should, in addition to what is envisaged in the present plan period, be intensified. More runways and other general improvement of the airports at Calabar, Port-Harcourt, Benin and other cities should be undertaken to raise these airports to international standards. The present plan to have six international airports in the country is not enough. Judging from the present pace of development in the country there will soon be a hue and cry, not only for more internal flight facilities, but also for international facilities. Therefore, it is advisable for the country to have a long term plan for more airports.

(II) More Aircrafts and Night Flight Equipment: The present twenty aircraft fleet for a populous country like Nigeria is highly inadequate. More aircrafts should be bought and landing aids provided, especially in the nights. The present poor communication media in the country calls for more air travel to make up for this deficiency, and night flight, when fully operated, will ease the airway's pressure during the day.

Private organizations should be encouraged to operate internal flights and easy terms should be made for theme to have licenses.

(III) Training of Indigenous Pilots: There should be intensive pilots training, not only in the Airforce base at Kaduna, but also abroad. The indignization decree should be enforced and more Nigerians made to man the aircraft operations. Technicians should also be trained in sufficient number to handle the major repairs in the country.

(IV) Office Buildings: Finally, more offices should be built in the states for air travel bookings. The present congestion in the few offices booking flights tend to waste time, which, as the Nigerians say, is money. Management of the airways operations should also be decentralized.

PORTS AND WATERWAYS

(I) Ports expansion and dredging: As seen from the description the 1975-80 development plan, the provision made for ports development is impressive. If this will be fully implemented, the country should be needing a little more expansion of the existing ports to take in more ocean liners that at present can only anchor off the open sea at Calabar, Burutu and other small ports.

Dredging of the inland waterways are also highly essential for easy linkage of the seaports. Such Niger ports as Onitsha, Baro, and the rest along the Niger and Benue Rivers should be developed to assist the road transport in evacuating agricultural produce from the northern states down to the southern seaports.

(II) Enlargement of Nigerian National Shipping Line (NNSL): The Nigerian Shipping Line should expand to present traditional operations only in the United Kingdom and Africa. Such other countries as the United States, Brazil, and other western sea routes should be linked. More container vessels should be bought in order to enable the NNSL to carry even more than the thirty percent of the country's produce envisaged by 1980. The present fleet size which limits the shipping line to only seven percentage carriage capacity of the Nigerian goods is too small. There is a possibility of 35 percent if more ships can be bought.

(III) More Bonded Warehouse/Container Freight Stations: In recent years, the existing port facilities have been unable to handle the large numbers of arriving cargo containers. This contributed immensely to Lagos port congestion of 1975. Although Apapa Wharf is currently undergoing expansion and building of new bonded warehouses, the ports of Calabar, Port-Harcourt, and the rest are still deficient in this aspect. Bonded warehouses and container freight stations should be extended to these ports.

(IV) Ferry Boats: There should be more and modern boats to serve in creeks and other inland waterways to ferry people across the rivers.

SUMMARY AND CONCLUSIONS

As seen from the above, Nigeria's transport problems are shackles that thwart her free march towards industrialization. This urgent and now widely recognized need to improve and extend transport facilities in the country is clear from the fact that the transport sector absorbed more than 25 percent of the investment in the three development plan periods (1962-68, 1970-74, and 1975-80).

There are two major reasons for giving transport development such a prominent place in the national development plans, ranking second after industries and absorbing ₦7.3 billion in the third plan period. First, the development process depends, to a large extent, on the efficiency of the country's transport network. Distribution, consumption, and to an extent, the production of all commodities are affected by the transport system. It is also vital to our export and competitive ability in the world market with other nations. Thus, transport sector forms the wheel upon which other economic activities roll.

Secondly, improved and extended transport facilities are necessary for the widening of the internal markets which in turn stimulate production. Nigeria's recent oil boom has improved her export earnings and consequently stimulated other economic activities. New internal markets have developed, and there can be no success without good transport facilities to cope with the sharp demand for food and manufactured goods.

The development plans have done a lot to improve the transport system, but much of the efforts are concentrated in the cities, leaving the rural areas with little or no improvements. Excepting oil, agriculture still forms

the backbone of Nigeria's economy, accounting for about 50 percent of Gross Domestic Product at current factor cost in 1970-71 and employing about 72 percent of the labor force in the same period.[92] This agriculture which is responsible for a greater part of the country's export than any other sector, and local food consumption, is concentrated in the rural areas. The cities depend upon the rural farmers for their supply of food, hence the country's recent campaign for intensive farming--"operation feed the nation." As B. W. Hodder states, "It is useless trying to encourage agricultural proceeds other than by head porterage."[93] Therefore, the country's economic development planners should, in the future, do everything possible to increase transport network in the rural areas. This will provide a better link between the cities and the farming areas, thus intensifying modern agricultural techniques. Perhaps with good transportation facilities, the present mass exodus of people from the rural to the urban areas could be reduced since there are equally paying jobs in the farms. Furthermore, people interested in urban jobs can travel easily from their homes to these urban areas.

More emphasis should be given to road construction in the country since it handles the bulk of Nigeria's traffic. The present 77 percent of transport allocation given to roads development should be increased to 80 percent or more, and concentration should not be in the cities anymore.

World Bank Report, Nigeria, Option for Long Term Development (Baltimore: The John Hopkins University Press, 1974), p. 77

B. W. Hodder, Economic Development in the Tropics (London: Methuen and Co., Ltd., 1968), p. 193.

The economic development and welfare of Nigeria depends to a great extent on efficient and adequate transport networks as well as agriculture and industry. More emphasis should therefore be concentrated on these three pillars of development, with more efforts geared towards rural transport development.

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